The Province of Alberta

IN THE MATTER OF THE PUBLIC UTILITIES ACT

—and—

IN THE MATTER OF rates charged by The Valley Pipe Line Company Limited

G. M. BLACKSTOCK, Esq., K.C.
Public Utilities Commissioner

Session:

CALGARY, Alberta January 29th and 30th, 1946.

VOLUME 28.

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January 29th, 1946.
9.30 A.M.Session.

WITNESSES

I N D E X Cont'd.

E X H I B I T S

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File P.U. 4871.

ORDER NO. 10014.

THURSDAY - THE TWENTY-SEVENTH DAY OF APRIL, A.D. 1944.

Before:	IN THE MATTER OF "The Public Utilities Act":
The Board of Public Utility Commissioners for the Province of Alberta	AND IN THE MATTER OF an Investigation into the rates charged by the Valley Pipe Line Company Limited.

For the reasons set forth in its decision, dated the 14th day of April, 1944, following upon an investigation into the rates charged by Valley Pipe Line Company Limited, held between 15th November, 1943, and 11th February, 1944, the Board of Public Utility Commissioners now determines and IT IS ORDERED:

(1) That the rate base upon which the Valley Pipe Line Company Limited (hereinafter called "the Company" is entitled to a rate of return is the sum of One million and eleven thousand and fifty-one dollars and six cents ($1,011,051.06), as at 31st December, 1943, as the same is detailed and set forth in the decision aforesaid.

(2) That the rate of return to be allowed to the Company on the said rate base shall be Eight (8%) per centum per annum to be calculated thereon from the 1st day of May, 1944, and until further order.

(3) That a rate of Seven and one-half (7½¢) cents per barrel be allowed to the company for the transportation of petroleum or petroleum products, whether from wells, absorption plants or elsewhere in the Turner Valley Oil Field to refiners' storage tanks and terminal storage tanks in Calgary, effective on and after the 1st day of May, 1944, and until further order.

(4) That a rate of two and one-half (2½¢) cents per barrel be allowed to the company for loading petroleum or petroleum products into tank trucks.

(5) That a rate of two and one-half (2½¢) cents per barrel be allowed to the company for loading petroleum or petroleum products into tank cars.

(6) That the company be at liberty to deduct One-half of one per cent (1/2 of 1%) of all crude oil transported through its lines to cover pipe line losses but subject always to an accounting by the Company for any oil so deducted in excess of actual losses.

(7) That the Company be at liberty to deduct one and one-half (1 1/2%/ per cent of all absorption gasoline and naphtha transported through its lines to cover pipe line losses, but subject always to an accounting by the Company for any oil so deducted in excess of actual losses.

(8) That the costs incurred by the Government of the Province of Alberta in connection with the said investigation, amounting to Eleven thousand six hundred and twenty-six dollars and eighty-eight cents ($11,626.88), be paid to it by the Valley Pipe Line Company Limited.

(9) That this Order is supplemental only to said decision and does not in any way derogate from or affect the findings or conclusions therein set forth.

(10) That the rate base aforesaid, the several service rates and all other matters dealt with in said decision and not finally disposed of therein shall be subject to review by the Board as soon as is practicable after 31st December, 1944.

THE BOARD OF PUBLIC UTILITY COMMISSIONERS

(SIGNED) G. M. BLACKSTOCK,
CHAIRMAN;

Certified a true copy.
G. A. Thibault
Secretary.

. . . . . .

IN THE MATTER OF "The Public Utilities Act":

AND IN THE MATTER OF rates to be charged by the Valley Pipe Line Company Limited:

In its decision dated April 14th, 1944, the Board fixed a rate to be charged by the Valley Pipe Line Company Limited for the transportation of petroleum and petroleum products from the Turner Valley Oil field to the Company's terminal in the City of Calgary at seven and one-half (7½) cents per barrel. The Board further directed that the company's rate base should be determined as soon as possible after the beginning of each year and that the service rate for each year should be determined according to the nature and amount of all relevant factors. The rate for the period from 1st May, 1944, to 31st December, 1944, was arrived at on the following basis:

Operating expenses as estimated by Mr. Coultis but omitting charges for terminal storage	$ 310,800.00
Sundry and miscellaneous expenses	34,200.00
	$ 345,000.00
Depreciation on unit method	99,484.92
Income Tax - 40%	56,583.25
Return on rate base	84,874.88
Total revenue required	$ 585,943.05

Estimated throughput	7,998,802 barrels
Service rate required - 1944	7.3253¢ per barrel
Service rate fixed - 1944	7.5¢ per barrel

It will be observed that the estimated throughput for the whole of the year 1944 was 7,998,802 barrels, the estimate having been made by company officials. The actual throughput for the year was 7,685,839 barrels or 312,963

barrels less than the estimated throughput. It will be observed that the estimated operating expenses (estimates made by the company) amounted to $345,000.00, whereas the expenditures in fact amounted to the sum of $411,029.41 or $66,029.41 more than the estimate. The inevitable result of a smaller throughput and greater operating expenses was that the company failed to earn its rate of return of eight and one-half (8½%) per cent per annum on its rate base by the sum of $4,243.27.

On 27th February, 1945, the Board met officials of the Company for the purpose of determining the service rate for the year 1945. The estimates submitted by the Company as adjusted by the Board, are as follows:

Pipe line operating expenses	$334,420.00
Sundry and miscellaneous expenses	46,683.00
	381,103.00
Depreciation on unit method	86,472.00
Income and Excess Profits Taxes 40%	53,468.00
Return on rate base as at 31st December, 1944	80,202.00
Total revenue required	$601,245.00
Estimated throughput	6,722,895 bbls.

The Company has already billed shippers for the January throughput of 641,385 barrels, at the rate of seven and one-half (7½) cents per barrel, which yielded to the Company the sum of $48,103.88. From this it will be seen that the balance of revenue required, $553,141.12 will have to be earned from the throughput for the remaining eleven months of 1945, i.e. 6,081,510 barrels. As a result the mathematical service rate should be 9.09545 cents per barrel.

The rate for the balance of the year will therefore be fixed at Nine and one-quarter (9.25) cents per barrel.

There will be no change in the pipe line loss deduction rate, in the method of computing depreciation or in the rate of return on the rate base.

The attention of all persons affected by the provisions of this decision is called to Section 90 of The Public Utilities Act, which is in the following terms;

"No order involving any outlay, loss or deprivation to the proprietor of any public utility or to any municipality or person shall be made without due notice and full opportunity to all parties concerned, to make proof to be heard at a public sitting of the Board, except in case of urgency, and, in such case, as soon as practicable thereafter, the Board shall, on the application of any party affected by such order, rehear and reconsider the matter and make such order as shall seem just."

Any person affected by this decision has the right to make an application to the Board under the provisions of this Section.

DATED AT EDMONTON, in the Province of Alberta, this 6th day of March, A.D. 1945.

THE BOARD OF PUBLIC UTILITY COMMISSIONERS

(SIGNED) G. M. BLACKSTOCK

CHAIRMAN

Certified a true copy,

"G. A.Thibault"

Secretary.

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ORDER No. 10184. File P.U. 4871

WEDNESDAY - THE SEVENTH DAY OF MARCH, A.D. 1945

Before:	IN THE MATTER OF "The Public Utilities Act":
The Board of Public Utility Commissioners for the Province of Alberta	AND IN THE MATTER OF rates to be charged by Valley Pipe Line Company Limited

For the reasons set forth in its decision, dated the 6th day of March, 1945, following upon an examination of the operating results of the Valley Pipe LineCompany Limited, in respect of the year ended 31st December, 1944, the Board of Public Utility Commissioners now determines and IT IS ORDERED:

(1) That the rate base upon which the Valley Pipe Line Company Limited (hereinafter called "the Company") is entitled to a rate of return is the sum of Nine hundred and sixty-three thousand, one hundred and six dollars and eighty-seven cents ($963,106.87), as at 31st December, 1944, as the same is detailed and set forth in the schedule hereto attached.

(2) That the rate of return to be allowed to the Company on the said rate base shall be Eight (8%) per centum per annum to be calculated thereon from the 1st day of January, 1945, and until further order.

(3) That a rate of Nine and one-quarter cents (9¼¢) per barrel be allowed to the company for the transportation of petroleum or petroleum products,

whether from wells, absorption plants or elsewhere in the Turner Valley Oil Field to refiners' storage tanks and terminal storage tanks in Calgary, effective on and after the 1st day of February, 1945, and until further order.

(4) That a rate of two and one-half (2½¢) cents per barrel be allowed to the Company for loading petroleum or petroleum products into tank trucks.

(5) That a rate of two and one-half (2½¢) cents per barrel be allowed to the Company for loading petroleum or petroleum products into tank cars.

(6) That the Company be at liberty to deduct one-half of one per cent (1/2 of 1%) of all crude oil transported through its lines to cover pipe line losses but subject always to an accounting by the Company for any oil so deducted in excess of actual losses.

(7) That the Company be at liberty to deduct one and one-half (1 1/2%) per cent of all absorption gasoline and naphtha transported through its lines to cover pipe line losses, but subject always to an accounting by the Company for any oil so deducted in excess of actual losses.

(8) That the rate base aforesaid, the several service rates and all other matters dealt with in said

decision be subject to review by the Board as soon as is practicable after the 31st day of December, 1945.

THE BOARD OF PUBLIC UTILITY COMMISSIONERS

(SIGNED) G. M. BLACKSTOCK

CHAIRMAN.

Certified a true copy,

"G. A.Thibault"

Secretary.

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SCHEDULE TO ORDER NO. 10184.

VALLEY PIPE LINE COMPANY LIMITED

Rate Base, 31st December, 1944

	Gross Book Value	Reserve for Depreciation	Net Book Value
1939 Assets	$1,443,909.80	$1,046,223.59	$397,686.21
1939 Additions	69,216.56	42,189.79	27,026.77
1940 Additions	118,096.45	65,637.21	52,459.24
1941 Additions	113,595.38	52,902.17	60,693.21
1942 Additions	99,047.83	34,282.05	64,765.78
1943 Additions	140,803.61	27,859.67	112,943.94
1944 Additions	53,441.23	3,530.30	49,910.93
Cars and trucks	50,684.02	39,898.23	10,785.79
	$2,088,794.88	$1,312,523.01	$776,271.87

Lands, leases and easements	17,835.00
Working capital	169,000.00
	$963,106.87
Return at 8% on above	$ 77,049.00
Return on estimated additions of $78,825.00 for 1/2 year at 8%	3,153.00
	$ 80,202.00

THE PROVINCE OF ALBERTA

IN THE MATTER OF THE PUBLIC UTILITIES ACT

-and-

IN THE MATTER OF rates charged by The Valley Pipe Line Company Limited

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Hearing at the Court House, Calgary, on the 29th and 30th days of January, 1946, before G. M. Blackstock, Esq., K.C., Public Utilities Commissioner.

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PRESENT:

E. J. Chambers, Esq., K.C.,	Representing the Valley Pipe Line Company Limited.
E. D. Arnold, Esq.,	Representing The British American Oil Company Limited.
D. P. McDonald, Esq.,	Representing the Producers' Committee of The Alberta Producers Association.
R. J. Christian, Esq.,	Representing The Anglo-Canadian Oil Refinery, Brandon, Man.

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THE CHAIRMAN: I have not any very clear idea of how we are going to proceed. You wish, I believe, Mr. Chambers, to lead some evidence respecting the recoverable reserves in Turner Valley. I intimated to you I was not prepared to consider that at the moment. I do not know that I had any right to say that to you. If you wish to lead that evidence, I think I must hear it, which I am prepared to do. But I think it is right that you should know that Dr. Katz of Ann Arbor, will be here about the 15th of February and I propose to discuss the question of reserves with him. If he should be in substantial agreement with Mr. Connell I do not think I will call him at all. But if he does not agree with Mr. Connell, then I shall call him and give you an opportunity of cross-examination. If he is in substantial agreement, there is little point in keeping him here and calling him as a witness. That, however, can be discussed when the event happens.

MR. CHAMBERS: I had in mind having the application read into the record, and Mr. Connell, I thought I would put him in the box because on that part of the application he is the only man who can speak to it. Then I would have Mr. Constable go in the box to deal with accounting and other matters that were in the application, if that is agreeable to the parties.

THE CHAIRMAN: All right. Mr. Chambers, there is one thing more I might say, I cannot sit more than two days.

MR. CHAMBERS: I do not think we will take that long. I think probably I should file first of all the affidavit of service of the notice.

DOCUMENT IN QUESTION IS NOW MARKED EXHIBIT 1.

MR. CHAMBERS: While there is not attached to the affidavit of service a copy of the application which is referred to in the notice, the notice itself states that the narrative part of the application accompanied the notice and if anybody desires I can file a supplementary affidavit proving that.

THE CHAIRMAN: I think every one is here excepting Home Oil.

MR. CHAMBERS: We notified all our customers, that is the refineries too, as shown by the affidavit. Probably, Sir, if I could just briefly for the purposes of the record, as an opening, give a very brief resume of the position. Pursuant to its decision, which was dated, as I recall it, the 14th of April, 1944, following a long hearing in the Fall of 1943 and continuing into 1944, the Board made its final Order No. 10014, which was dated April 27th, 1944, which fixed those rates. First of all a service rate of 5½ cents per barrel as from May 1st, 1944.

THE CHAIRMAN: 9½ cents.

MR. CHAMBERS: 7½ cents it was.

THE CHAIRMAN: You said 5½ cents.

MR. CHAMBERS: I am sorry, 7½ cents per barrel as from May 1st, 1944. Secondly, 2½ cents per barrel rate for loading tank trucks and tank cars, and thirdly, one-half of 1% deduction for crude oil line losses, and fourthly, 1½% deduction for absorption gasoline and naphtha line losses. That operated as the Order states and as I have mentioned, from May 1st, 1944. And that same Order 10014 stated also that these were predicated on, and in the order there was fixed a rate base of the Company of $1,011,051.06 as at December 31st, 1943, and a rate of return allowed

thereon, on that rate base, of 8% from May 1st, 1944. The Order also stated that the aforesaid rate base and the charges should be subject to review as soon as practical after December 31st, 1944. Now that was the position so far as the Order of 1944 was concerned.

Now following the close of its 1944 operations, the Company, on January 25th, 1945, filed with the Board an accounting in respect of its 1944 operations, which showed a small deficiency of something in the neighbourhood of $5000.00, as I recall it, below the 8% return. At the same time, on the 25th of January, 1945, the Company made application for a new 1945 rate. As a result of that application the Board, on March 7th, 1945, made its Order No. 10184, which provided first that the rate base of the Company as at December 31st, 1944, was $1,963,106.87 and the rate of return on that rate base was to be 8% as from January 1st, 1945. The service rate should be 9¼ cents per barrel as from February 1st, 1945. The loading charge for tank cars and tank trucks was 2½ cents per barrel and the line loss deductions were to be one-half of 1% line loss with respect to crude oil and 1½% line loss deduction as regards absorption gasoline. Now that last Order is the one in respect of which we operated to the end of 1945, and which still remains in force until any changes are made in it. In December, namely about the 12th of December, the Company made up an application for a new rate as from January 1st, 1946, and appended to it its accounting and other submissions with respect to 1945, and estimated the December business, and following that application the Company, pursuant to the Board's direction, issued the notices which are referred to in the affidavit, Exhibit 1. Now it occurred

to me, Sir, that before reading the application I probably should call Mr.Connell first,because part of the application, the first Schedule of it, Mr.Connell is the only man who can really speak to, and if that is agreeable I will call him.

THE CHAIRMAN: Yes.

.....

GORDON ALLEN CONNELL, having been duly sworn, examined by Mr. Chambers, testified as follows:-

Q Mr.Connell, your full name is Gordon Allen Connell?

A That is correct, sir.

Q What is your present position, Mr. Connell?

A I am Chief Petroleum Engineer for the Royalite Oil Company Limited in Turner Valley.

Q Would you just briefly tell us your educational and academic qualifications?

A In 1937 I graduated from the University of Alberta with the degree of Bachelor of Science in Chemical Engineering. I was first employed in the oil business by the Petroleum and Natural Gas Division of the Department of Lands and Mines of the Alberta Government. I took that position on October 1st, 1937. I was employed both in Edmonton and Calgary, and also in Turner Valley, as a petroleum and natural gas engineer. On the formation of the Conservation Board on July 1st, 1938, I was put in charge in the field, that is in Turner Valley, of the Conservation Board's field activities, That was mainly in compiling statistics and also running production and bottom hole pressure tests.

Q In Turner Valley?

A In Turner Valley. I did have a certain amount of work to do

with wildcats, of a statistical nature. On June 1st, 1941, I joined the Royalite Oil Company as the Assistant Petroleum Engineer, and continued in that capacity until April 1944, when I was appointed Chief Petroleum Engineer of the Company. I am still employed in that capacity.

Q As I understand it you made certain estimates concerning gas reserve in Turner Valley, and gave evidence on behalf of the Royalite Company before the Natural Gas Hearing that is still current?

A Yes, both Royalite and Madison.

Q Now, Mr. Connell, I understand that you prepared a report for Mr. Coultis, the President of the Valley Pipe Line Company Limited, which is dated the 5th of December, 1945, and that you prepared that report pursuant to a request from Mr. Coultis?

A That is correct.

MR. CHAMBERS: Should we read this report first before having it marked?

THE CHAIRMAN; I think it should be read first, Mr. Chambers.

Q MR. CHAMBERS: All right. Will you read your letter, Mr.Connell?

A It is a letter directed to Mr. S.G.Coultis, President, Valley Pipe Line Company Limited, dated December 5th, 1945. He requested me to make an estimate of the crude oil production for the years 1946 to 1952. I will now read my reply to his request. It is dated the 5th of December, 1945.

"Dear Sir:

As requested, an estimate has been made of the Turner Valley Crude Oil Production for the years 1946 to 1952 inclusive, as follows:-

"

Year	Daily Average Bbls.	Yearly Total Bbls.
1946	16,149	5,894,365
1947	13,307	4,857,190
1948	10,383	3,800,255
1949	7,652	2,793,190
1950	5,606	2,045,944
1951	3,885	1,418,292
1952	2,446	895,049
TOTAL		21,704,285

Estimates for wells completed in the years from 1937 to 1943 were made by extrapolating rate - time curves mathematically, using the straight line obtained by the method of least squares for the period January, 1944 to September, 1945. For wells completed in 1944 the extrapolation was based on the production data for the first nine months of 1945."

I did that because it was not until the end of 1944 that those wells would have all been completed and their decline rates would have started in 1945 for the whole group of wells.

"As Model #1 and Model#2 were shut in for the most of 1945, the extrapolation of the pre-1937 wells was increased to allow for the production from these wells when they are operated again. For the wells completed in 1945, extrapolations were based on the production data already available at these wells and decline rates were based on information obtained from neighbouring wells. For the wells which are estimated

"to be completed in 1946 and 1947, estimates of initial production and decline rates were also based on information obtained from surrounding wells.

As can be seen from the attached graphs, the decline curves are approaching straight lines as as the wells grow older, but are not quite true straight lines as the decline rates are decreasing slightly. Therefore, using a straight line extrapolation would result in estimates which are slightly on the conservative side. The estimated productions have therefore been increased progressively to allow for this trend. The estimates based on straight line extrapolations were increased by 2% for 1946, 4% for 1947, 6% for 1948, 8% for 1949, 10% for 1950, 12% for 1951 and 14% for 1952, which, from the trend of the decline curves, appear to be reasonable allowances.

On the attached graphs, the straight line extrapolations are shown in black, while the adjusted extrapolations are shown in red. Also attached is a summary of the estimated daily average and yearly productions for the crude oil wells, by years of completion.

It is estimated that nine Royalite operated wells will be completed in 1946 and two in 1947. Continental Oils #1 is the only independent well which we know will be completed. However, allowance has been made in our estimates for the completion of two Home Millarville wells in 1946 and four in 1947."

I was notified last week that the Home Millarville are starting two new wells in the near future.

THE CHAIRMAN: Is there any information about those two that you have taken into consideration?

A Well those were just the ones we estimated would be completed and we know now that they are going to drill two wells.

Q Two more?

MR. CHAMBERS: No, these two.

A That would take care of these two.

"The estimated completion date for the last two wells is December 1947 with production starting in January 1948. Any variation in the number of wells completed, their initial production or decline rates as estimated, will necessitate a corresponding adjustment in the estimated production.

In making these estimates it was assumed that the wells would be abandoned when the average production for the group of wells declines to 10 bbls/well/day.

The production from the wells which were transferred from crude oilwell to gaswell classification as of January 1943, or later, are included in the crude oilwell production estimates.

Estimates of the crude naphtha production were also made, based on the estimated gas cap well withdrawals and gas-oil ratios for the 12 months production data ending in October 1945 for Royalite Operated wells and for the 12 months ending in September 1945 for wells in the B.A. and Gas and Oil Products area."

At that time I made these estimates, I had the Royalite data to the end of October, whereas for the independent wells we only had data to the end of September.

"Estimates of the absorption gasoline were made by the

"Royalite Gas and Gasoline Department Engineers and submitted to you in Laboratory Report No. 6245, dated October 26th, 1945.

Following is a summary of the crude oil, naphtha and absorption gasoline for the years from 1946 to 1952:

Year	Crude Oil Production	Crude Naphtha	Absorption Gasoline	Totals
	Bbls.	Bbls.	Bbls.	Bbls.
1946	5,894,365	6,700	392,640	6,293,705
1947	4,857,190	6,300	273,960	5,137,450
1948	3,800,255	6,300	250,240	4,056,795
1949	2,793,190	6,500	222,000	3,021,690
1950	2,045,944	7,300	205,000	2,258,244
1951	1,418,292	7,600	192,000	1,617,892
1952	895,049	8,200	181,000	1,084,249
TOTAL	21,704,285	48,900	1,716,840	23,470,025

As Mr.V. Taylor, our former Production Superintendent has been transferred to the Toronto Office, the above estimates were made under my supervision. The method of making the above estimates was discussed with Mr. Taylor, prior to his departure for Toronto."

Q MR. CHAMBERS: I take it that Mr.Taylor has agreed in the information you show?

A That is correct.

Q You have certain graphs and material attached to the report, to your letter. Will you describe them please?

A I have given here estimates of crude oil production for 1946 to 1952. These were based on the attached graphs and were made on a straight line extrapolation, and then increased these

values as obtained by the straight line extrapolation as outlined in the letter., In one page here I gave the an estimated daily average production and on the other Table I give the production by years, and these were based on the graphs of family curves. In making the family curves we took all wells completed in one year and plotted their daily average production by months on semi-logarithmic paper and then made extrapolations mathematically of those curves, and made increases in the production as outlined.

Q Mr. Connell, on some of these graphs there is a red line and a black line. Will you give us the significance of those?

A The black line is the mathematical straight line extrapolation of these curves whereas the red line is the extrapolation of the black line plus our allowances for the variation from the true straight line which we have estimated.

Q The figures you have used, are they based on your red line or black line?

A They are based on the red line. That gives a value slightly larger than the black line.

THE CHAIRMAN: I would like you to deal with each of these graphs in turn, Mr.Connell, commencing with 1944. I think I remember about it but if you will explain them again?

A 1944, there was a total of 41 wells completed. They were completed at various times during the year, so that the figure on January 1944 would represent the average production for the wells that were completed in January 1944.

Q And that average would be four hundred and something barrels a day?

A Just a little over 420 barrels per day for the number of

wells completed to that date. We thought there would be more wells completed, so the production would be increased.

Q Until it arose to a high in September of 1944 of.....

A Approximately 4500 barrels a day. Then all the wells would be completed by December 1944, and from there on there would be 41 wells producing in 1945, and that would be then a figure of approximately 4150 barrels per day, would be the average production for those 41 wells in January, 1945, and the average production in February 1945, would be approximately 3950 barrels per day.

Q Then when we come to, I think it is September 1945, that has gone down to how much?

A Approximately 3250 barrels per day.

Q And then you extrapolate your curves from the high and the low?

A That is a mathematical extrapolation known as the method of least squares and it is based on that nine months' production for the wells completed in the year 1943, and we still use the figures.....

Q MR. CHAMBERS: Can you tell us anything more about this least squares that would be intelligent to us?

A Well, that is involved all right. It is a mathematical method.

THE CHAIRMAN: If you know higher mathematics, it is all right, but if you do not you will have a hard time understanding it.

MR. CHAMBERS: I do not understand much about higher mathematics.

Q THE CHAIRMAN: We can put it this way, Mr.Connell, can we not, that your mathematics operate on a fixed law?

A Yes.

Q And your oil, which is a physical problem, does not operate on a fixed law?

A No, not necessarily.

Q And that brings you back to the old argument as to how you shall draw your extrapolation, does it not?

A That is correct.

Q And we take the argument I have heard before, if you are preparing your estimate for one purpose, you might extrapolate in one way, and if you are preparing it for another purpose you might extrapolate it in another way and still remain within the bounds of honesty?

A Yes.

Q Is that right?

A That is correct. That is why when I used this method of least squares you get a straight line basis of figures you have used. You notice from these figures that this line, the curve is not a true straight line and that is why I have made an allowance to compensate.

Q MR. CHAMBERS: By the red lines?

A Yes, using the red lines. I used this allowance to compensate for the variation from the true straight line.

Q THE CHAIRMAN: Still looking at your 1944 graph, you have extrapolated down to 1950, that is correct?

A That is correct.

Q At which time the average production is down to about 400 barrels?

A Is 410 barrels per day, that would be an average of 10 barrels per well per day, 41 wells.

Q In the graph you have adjusted the extrapolation and that brings you to October 1945?

A September 1945.

Q With the same average production?

A That is correct.

Q Would you give me the number of wells on your other graphs, Mr.Connell, please? Now the 1943 graph?

A 1943 would be 23 wells, 1942 29 wells. These are all given on this estimated crude oil production chart.

Q Oh, I see, all right.

A I can give it to you if you want them?

A Oh no, they are on this other sheet?

A Yes.

Q MR. CHAMBERS: That is the material shown on pages 15 and 16?

A Yes.

Q Now as I understand it, Mr. Connell, the more history that you have of a particular well or group of wells, and their production, the more accurately you can expect to predict what they will produce in the future?

That is correct. After they have been in for a year or possibly two years, they show a more decided trend, and it is easier to predict future production the older the wells are.

Q Aside altogether from having the history of a particular well or group of wells, am I right in this, that the more knowledge you have of the actual behaviour of an oil field and the wells that we will say have been drilled and have produced and are at the bottom of their production, is that of any assistance to you in predicting what will happen to the wells that are now current?

A Well experience in a particular field you are dealing with is certainly a marked advantage in making future predictions.

Q What would you say as to the amount of, or the relative amount of knowledge or data that is available in the Turner Valley

field? I want it for the purpose of the record, whether the field has been fairly extensively drilled or what the proportion is and so on. Can you tell us something about that feature?

A Well it appears now that practically all the proven acreage has been drilled up. You will notice there I have estimated 12 wells to be completed in 1946. Three of those have been completed already. Six in 1947, so that would leave nine to be completed in 1946, and six in 1947, fifteen wells of a total of three hundred which is estimated will be drilled.

Q Can you give us just a horseback figure of the approximate number of crude wells that have been drilled in Turner Valley say?

A It would be 285.

Q And that started back in 19.....

A Including Model 1 and 2, 1930 was the completion of those.

Q And after Model 1 and 2?

A Then Turner Valley Royalties in 1936.

Q And this two hundred odd figure you have mentioned includes the two Model wells, and then you take all the crude wells that have been drilled as and from Turner Valley Royalties in 1936, was it, you said?

A 1936, yes. In my estimates I included Sterling Pacific 3 and Model-Spooner 1 as gas cap wells.

MR. CHAMBERS: Now, Sir, I have referred in the application to estimates that were made at another time and place by other parties, Mr. Stanley Davies, Mr. Ralph Davis and Mr. Krampert. I realize that this witness cannot speak as to the method these gentlemen used, but I do suggest that it would be of interest if we have it on the record. As I understand Mr. Connel has available and has perused the original reports of these parties and I would like to have

these figures put on the record.

THE CHAIRMAN: I am quite willing if no one else objects.

MR. CHAMBERS: Probably I should have this report of Mr.Connell's marked Exhibit 2, including the Schedules to which he refers.

DOCUMENT IN QUESTION IS NOW MARKED EXHIBIT 2.

Q Mr.Connell, you were present and heard Mr. Ralph Davis and Mr.Stanley Davies give their reports in the Natural Gas Hearing in which they mentioned and dealt with the oil reserves. Would you give us just briefly what they said about the amount of production that is likely to be obtained of petroleum from Turner Valley?

A Oh page 9 of Mr. Ralph E. Davis' report before the Natural Gas Utilities Board, it shows an estimated production for the years from 1945 to 1952, from the South end of the field of 11,200,000 barrels. On Page 15 of the same report he estimates production for those same years, 1945 to 1952, of 15,530,000 barrels which would give a total.....

Q That is in the North end?

A That is in the North end, yes.

Q Yes?

A Which would give a total for the field of 26,730,000 barrels for those eight years. We adjust for the 1945 production and these figures we obtained from the Conservation Board yesterday. 6,996,727 barrels, which leaves a total for the 1946 to 1952 production of 19,733,263 barrels. As I pointed out to you that is the correction there on your Page 5.

Q Of the application?

A Of the application. That figure of 7,422,330 barrels in-

cluded the crude naphtha and absorption gasoline.

Q And these figures you are now giving are crude production?

A That is just crude oil production.

Q THE CHAIRMAN: What method did he use in making that calculation?

A He used the straight line extrapolation, the observed decline rate. Mr. Stanley Davies , using a similar method in his Exhibit Number 40 at the Natural Gas Hearing, showed a total estimate, on Page 43 of his Report.

Q MR. CHAMBERS: That is Exhibit 40?

A Exhibit Number 40 on the Natural Gas Hearing case, for 1945 to 1960, of 28,905,036 barrels. If we adjust his figures and exclude 1953 to 1960 production, we have a figure for 1945 to 1952 of 25,935,496 barrels. That would be from 1945 to 1952, eight years.

Q What method did Mr.Stanley Davies use?

A He has used the decline method, the observed decline in production. Dr. Katz, to whom the Chairman has already referred, gave evidence at that hearing but did not, as I understand it, deal with oil reserves.

Q No, he used figures on oil in making his estimate, but it was not for the purposes of oil reserves.

Q MR. McDONALD: Would you mind making a calculation for Stanley Davies up to 1952, from 1946 to 1952?

A Yes.

Q MR. CHAMBERS: As I understand it, this 85,278,347 barrels, that is the position to the end of 1952, and you just check me, Mr. McConnell. I get it this way. He gave the crude oil reserves from 1945 to 1960 as 28,905,036 barrels, and the actual production up to January 1st, 1945 was 59,342,851 barrels,which gives us a grand total of 88,247,887 barrels, and

then if you take off what Mr.Davies estimated for the years 1953 to 1960 of 2,969,540 barrels, you have a total figure as for the period up to and including 1952, of 85,278,347 barrels, is that right?

A That is correct.

Q MR. McDONALD: What is that last figure, the two million barrel deduction from 1953?

MR. CHAMBERS: 2,969,540 barrels. That appeared on Page 43 of Mr. Stanley Davies' report, Exhibit 40.

Q Now just for the purposes of the record, because the report is already before the Board, I would like you to recapitulate what Mr. Krampert said when he was here, and gave evidence in the Hearing in 1943 and 1944.

A Mr. Krampert's estimate was Exhibit Number 28 in the Hearing, starting in 1943, and continuing into 1944. On Page 109 of that Exhibit he estimates crude production for the years 1944 to 1952 as 34,827,860 barrels. He estimates absorption gasoline at 2,375,343 barrels. That is given on page 10(g). His estimates for the naphtha are given on Page 10(c) as 720,000 barrels, making a grand total for the nine years of 37,923,203 barrels. We deduct the actual production in 1944 and 1945, 15,748,644 barrels, and it leaves a total for 1946 to 1952 of 22,174,559 barrels.

Q There might, as I understand, be a slight variation on that on account of you now having for the first time the actual for 1945?

A Yes, that is right. He would not have them at the time this was made up.

Q It would not vary by 100,000 barrels would it?

A There is only about 3000 barrels.

Q Mr. McDONALD: You might give us the actual production

for 1945 if you have it?

Q MR. CHAMBERS: You got that yesterday?

A Yes, from the shallow crude, 3932 barrels. Gas cap wells, this is excluding the 10 converted wells that were converted from oil wells to the gas cap classification, 8862 barrels, and crude oil, including the 10 converted wells, 6,996,727 barrels, and absorption gasoline 412,540 barrels, giving a grand total of 7,422,061 barrels for the year 1945.

Q And those are the figures that the Conservation Board had available for you for the first time yesterday?

A That is correct.

Q Mr.Connell, I notice that you use the year 1952 as the period to which you are making your estimate, and I notice that Mr. Ralph Davis used those years and Mr. Krampert, I think, used those years?

A That is right.

Q Would you tell the Board why you came to take 1952?

A Well, after 1952 there undoubtedly will be a certain amount of crude oil production, but it is only going to be a small percentage of the total that has yet to be produced.

Q I assume that is based, that statement of yours is based on your knowledge of the field as to the sites that have been drilled and the sites that are left?

A And the sites that are liable to be drilled.

Q In the light of your information can you give us any idea or your opinion as to whether, in the absence of unforeseen things to come, as to whether the annual production from 1953 on will be larger or smaller, or appreciably larger or smaller than what you have estimated for 1952?

A Oh, production is bound to decline from 1952 on, because there will be no more new wells completed.

Q Why do you use this method of extrapolating, and I notice that some of the others used the same method, why do you use that in preference to some other method in this particular case?

A You mean extrapolating on semi-logarithmic paper?

Q Yes?

A When we extrapolate a straight line curve on semi-logarithmic paper, they approach the straight line, but as I pointed out there is no quite true straight line.

Q As I understand it there are other methods that petroleum engineers may use to conpute the reserves in an area?

A Yes.

Q Just outline them for us the different methods there are?

A The porosity area method, that is a method that is used usually in new fields where there is very little information on the production of that field. There is the material balance method which we found there is very little true reservoir pressure data available for the Turner Valley field, and that is chiefly due to low permeability. The application of it requires too great length of time to obtain true reservoir pressures and there is no definite information available as to the probable present recovery. The material balance method,if you have available the true reservoir pressures, will allow you to calculate the crude oil in space but it still will not give you the probable percentage of recovery. This method of plotting on semi-logarithmic paper is actually based on production data which we already have, and it is probably the most reliable for making an estimate of this nature.

Q Am I right in this, that in this particular case the relative amount of data available is large?

A It is quite large.

Q Because the field is comparatively well advanced?

A Yes, that is correct.

Q Is that a fair way to put it?

A That is correct.

Q All right, will you answer my learned friend?

THE CHAIRMAN: Mr. McDonald? If you want to postpone your cross-examination until this afternoon, that will be all right.

MR. McDONALD: No, I think we can deal with it now.

.....

CROSS-EXAMINATION BY MR. McDONALD.

Q I was interested in this allowance you made for increases in your estimates by progressive percentages. Now how do you arrive at the percentage from year to year, I mean progressive?

A That is based on this method of trial and it seemed to be a reasonable lining up with previous production data that we had available, as far as the extrapolation of the curve that was obtained after we made the allowance of 2%.

Q I was wondering if you arrived at it by drawing your curve and then drawing your straight line and calculating the difference between them as being approximately that?

A We had the straight line drawn in the first place and then we made the allowance for this 2% increase, 2% increase for 1946,,4% for 1947 and so on, and it seemed to give a reasonable allowance for variation from the true straight line. It is just a matter of looking at the pressure curve. You will note there is a definite flattening of the curve. It is not a true straight line.

Q That is what I noticed, particularly in the older wells, the line is tending to flatten all the time?

A That is correct.

Q So you make this adjustment to take care of that trend?

A Yes.

Q Is there any example of it? Would you want to choose one of them?

A Possibly the 1939 oil wells would show that.

Q Yes. So that is a matter of judgment, is it not?

A Yes, that is correct.

Q Just individual judgment?

A That is correct.

Q That is where you differ with slide rule mathematics?

A Yes. If you extended that black line back on these 39 oil wells, the black line would run below the rest of that curve.

Q Yes?

A Therefore I drew that red line to account for some..... it is the actual decrease in the decline rate.

Q You have not taken the full decrease as shown mathematically?

A No, that is correct.

Q You have made a judgment adjustment?

A That is correct.

Q Now you have really worked this out from the 1st of January, 1944, in respect to all of the wells?

A Except the 1944 wells.

Q Yes, except the 1944 wells, and that gives you roughly 21 months' data on all wells completed before 1944?

A Yes, that is correct.

Q I suggest to you if you had say 36 months or 40 months, you could still draw a more accurate curve?

A No, I disagree with that, due to that flattening.

Q Beg pardon?

A I disagree with that due to the flattening. If you had used say

from the beginning of 1943.....

Q No, I am not suggesting that you go behind 1944. I mean if you went on to the future and if we had another 10 months your line could be even more accurate than it is?

A We just have to work on the data we have available.

THE CHAIRMAN: You mean the tendency would be.....

MR. McDONALD: Yes, the tendency would be more definite,

A We always use the most recent data available.

Q Why didn't you go back to 1943, is there any particular reason?

A Just as I explained there, if we had used 1943 in those 39 wells, we would have got a greater decline rate on a straight line extrapolation.

Q You would have to make a greater judgment adjustment?

A That is correct.

Q MR. CHAMBERS: May I interject? As I understand if you went back further, the black line would have shown more of a dip?

A Yes, that is correct, the decline rates would have been greater.

Q MR. McDONALD: Now what do you say about the percentage of error that should be allowed in interpreting these.....

A I would think plus or minus 10%, that is on 1946.

Q Would that plus or minus 10% be extended to 1952 against your total, or just 1946?

A I would say the possibilities of error are greater as the years advance. That is to say you could probably estimate your 1946 certainly more accurately than you could say 1952. I would say on the over-all the plus or minus 10% I would estimate for these 7 years.

Q Do you know just what method was used by Mr. Davis? Was it the least squares method, do you know?

A No, I think he just used the observed declines,

Q Mathematically?

A Yes.

Q THE CHAIRMAN: Purely mathematically?

MR. McDONALD: Pure arithmetic, put it that way?

A Yes.

Q Would you suggest that these lines would require adjustment by judgment?

A Yes, his observed declines certainly would require adjustment due to this flattening. The semi-log period curve, the straight line of the semi-log curves gives you the decline rate per year.

Q And any figures of Mr. Davis would be subject to plus or minus error, substantial error?

A Yes.

MR. CHAMBERS: That is Ralph Davis?

MR. McDONALD: Ralph Davis, yes.

Q Also in arriving at his figures.....

A His figures would tend to be on the conservative side.

Q They tend to be on the conservative side?

A That is correct.

Q It is also true when he was making his estimate he had in mind making a gas reserve estimate rather than a crude oil estimate?

A He used it for the purpose of making a gas reserve estimate.

Q There is a relationship between crude oil and gas reserve in the crude oil area, the amount of gas that will be produced?

A Yes.

Q Will be relative to the crude oil produced?

A There is a definite relationship.

Q I was interested in that in that his estimate of the crude oil,

or the gas from the crude oil area, was 146 billion cubic feet as from December 31st, 1944, or January 1st, 1945?

A Yes.

Q I notice your estimate for a similar crude oil reserve goes so high as 260 billion and a second estimate of 155 billion?

A If you make the comparison on a similar basis, taking 10 barrels per well per day. If I remember correctly his figure is 146 against my 156.

Q On the same basis?

A On the same basis.

Q And for the same period of time?

A That is right.

Q And then Mr. Stevens-Guille's revised estimate what we call M-2 revised, gives a crude oil reserve or gas reserve of 184 billion, for the same area. Do you recollect that figure?

A Stevens-Guille 184?

Q 184.4.

A I do not think you can have it for the same period.

Q That would be a different period?

A Yes, that is correct.

Q And the 156 against 146 is for 10 barrels per well?

A 10 barrels per well per day.

Q And that is comparative?

A That is comparable.

Q When you were estimating your naphtha production as I take it from your submission, you did it on the basis of the gas-oil ratios?

A That is correct.

Q That is for the gas cap wells?

A For the gas cap wells, the ones that are producing naphtha.

Q What you did was you took the production records in 1945 or what were available?

A I had 9 months in 1945 and I used 3 months in 1944 for the Royalite wells. For the independent wells I used 4 months in 1944 and 8 months in 1945.

Q You took the gas-oil ratios?

A For a year's period in each case.

Q And you got an estimate of the gas that you think would be produced by those wells?

A That is correct. I took that from M-2 revised.

Q You made your calculation, and you divided your gas-oil ratio or your gas per barrel into your total?

A Yes.

Q THE CHAIRMAN: What factor did you use, what recovery factor?

A That does not apply to your crude naphtha.

Q Oh, I thought you were speaking of absorption gas?

A No, this is crude naphtha.

MR. McDONALD: This is crude naphtha, and we will come to absorption gas later on?

A Yes.

Q Did you estimate the proposed production of gas from the gas cap in arriving at that?

A I took that from this table 8-M-2 revised.

Q MR. CHAMBERS: When you talk of M-2 revised, that is a document that was filed in the other hearing as Exhibit 47?

A That is correct.

Q MR. McDONALD: That is why you indicate in 1952 you are going to have more crude naphtha than in 1946 and 1947?

A Yes, due to the increased withdrawals from the gas cap.

Q Now you did not make a calculation with respect to absorption

gasoline?

A No, the engineers of Royalite gasoline plant.

Q Can you tell us the basis on which that was done?

A They also used the report M-2 revised as far as gas withdrawals and then estimated the recovery at the plant based on past experience.

Q Do you know what factor was used?

A I cannot say for sure what G.P.M. they used as the recovery factor.

Q Do you know what product they contemplated producing? Would it be the 46 pound product or the 23-26 pound product?

A No, I do not know definitely when they considered that they might go back say from the 45 pound product back to the 20 or 23.

Q In making this calculation, in making your examination, you took into account every crude well that was in operation in Turner Valley?

A That is correct.

Q You did not take any segment and use that as a basis to make the estimate?

A No. It takes all producing wells into account.

Q Can you tell me the acreage that was drained by the wells comprised in the estimate?

A It would be in the order of slightly under 12,000 acres. Most of the wells are on 40 acre leases and there will be 300 wells when they are all completed as we have estimated. There will be just under 12,000 acres.

Q Have you made any allowance for gravity drainage?

A Just to the effect that has taken place in the past.

Q The effect that has taken place in the past influenced the history of these wells down to date?

A Yes, that is right, and that would be reflected in your decline curve.

Q So that in fact these wells can produce or may produce from more than 12,000 acres?

A Some of them. It all depends on how they are situated. It is quite possible that one well is not draining the complete 40 acres on which it is situated also.

Q Have you taken into account any new discovery in the North end of the field?

A No.

Q Or the possibility of it?

A No. I think it appears reasonable that we should not.

Q Now would the same remarks you made in regard to making an allowance for this progressive increase due to the flattening of the curve, apply to the Stanley Davies' calculation?

A His was also a mathematical basis and we have the same flattening there, so his estimates would be on the conservative side.

Q I was interested in that, because I abstracted the estimates per year from your estimates and Mr.Davis' estimates and Mr. Davies' estimates. You might just check Mr.Davies' estimate. Have you got Exhibit 47?

A Page 43.

Q Yes. Your estimate is in the order of 5,890,000?

A That is correct.

Q And Mr.Davies' is in the order of 5,428,000?

A That is correct.

Q Would you suggest there is a difference there because of this difference in judgment as to the projection of the line?

A It might also be due to the number of wells he has allowed to be completed.

Q Then we have 1947. Your estimate is 4,857,000 against Mr. Davies' 4,152,000?

A That is correct.

Q There is a considerable difference there. The next year, 1949, 3,800,000 is your estimate, and Mr.Davies' 3,090,000. I may say I calculated out Mr. Ralph Davis' estimate for that year and it is lower than the other two. 2,295,000. These differences would be partly due to the fact that they have not allowed for the flattening of the line and it is a matter of judgment?

A Also the allowance for new welks.

Q If we come down to 1952, if you would check Exhibit 47, Mr. Davies has shown 985,812 barrels for the production for 1952, and your estimate is 895,000. That is the first occasion on which your estimate is less than his?

A I have taken an arbitrary cut-off of 10 barrels per well per day, whereas he might have carried his completely through to 1952 without any reference to a cut-off of 10 barrels per well per day. You will notice in the estimated crude oil production for 1946 to 1952, I show no production say for the 1942 wells in 1952.

Q That is right. You were going on the assumption as soon as they got to 10 barrels per day they would be off production?

A That is the assumption I used.

Q Between Mr. Davies and yourself in making your estimates in connection with the Natural Gas Hearing, in estimating the gas reserves you also took the same view that there would be no production of gas at that point?

A That is one minimum limit I used on one side in the Gas Hearing.

Q And the other figure you used, the pressure.....

A Yes, operating tubing pressure of 5 pounds per square inch.

Q If it should happen that the gas production has a fair value, that will maintain these wells in operation beyond the 10 barrels per day period, then your estimate for instance in 1952 would be higher? Your figure should be higher?

A Yes, if there is additonal revenue you can increaase it slightly. If you are only getting 2 barrels per well per day additional for another year, it does not amount to a large percentage of oil that is going to be produced, but it is a possibility that if they can obtain a higher revenue that they can produce wells for a longer period of time. It would not have a large percentage effect on my estimate.

Q MR. CHAMBERS: What did you say at last?

A It would not have a large percentage effect on my estimate.

Q MR. McDONALD: What do you say about naphtha, crude naphtha? Is that going to continue as long as the gas cap is being operated?

A As long as the gas cap wells are produced.

Q Can you tell me this, what was Mr.Taylor's estimate on the 1945 production?

A 7,015,000.

Q And that was compared to the actual of.....

MR. CHAMBERS: Mr. Taylor's when?

MR. McDONALD: In January, 1945.

A I can give you the exact figure in just a moment. Crude oil production he estimated at 7,015,300.

Q And the actual production?

A 6,996,727.

Q Now would you say generally that your estimate is conservative?

A No, not necessarily. I would have said so if I had continued the straight line decline, but after making that allowance I think it could be the other way.

Q It could be either liberal or conservative?

A Yes.

MR. McDONALD: I think that is all, Mr. Chairman.

THE CHAIRMAN: Mr. Arnold?

MR. ARNOLD: No questions.

Q BY THE CHAIRMAN: I am looking at your 1939 graph. That is the graph for 1939 wells, and in 1939 the production was very great. That would be the first year of flush production?

A That is correct.

Q And in 1940 there were rather violent fluctuations in the production?

A That was due to the seasonal demands.

Q The production being rated to the market?

A To the market demand, yes. Proration was then based on the market.

Q In 1941 the flattening tendency is quite noticeable. It is still more marked in 1942 and progressively is it more marked until you come down to 1945. How do you account for that?

A The Brown Plan has been responsible in part for the North end wells. The Brown Plan was brought into full effect in July 1942, and the South end wells in September of 1942.

Q And that is where there is a distinct flattening of the curve?

A That is where there is a flattening of the curve from there on. That is not so marked with later wells.

Q You have not enough data for that, have you? I mean the flattening started, your latter wells, of course, were more efficiently produced than wells in 1939?

A That is correct.

Q And it is the efficiency of production that will affect your curve of course?

A It has definitely a relation to it.

Q And if found a still more efficient method of producing the field, then your production would probably increase and your curve would flatten out still more? Would that be a reasonable presumption?

A I think what you have in mind is more efficiency, haven't you?

Q I do not know. I am only fishing. Supposing we had a modification of the Brown Plan with so many barrels.....

A 25 barrels per acre per day.

Q Supposing that was modified in some way?

A I checked up on that just about a year ago. There was approximately, if I remember the figures correctly, about 38% of the wells producing approximately 42% of the oil in the field. They were producing less than the Brown Plan. Some of them could not produce 25 barrels per acre per day, and others were voluntarily reduced by the operators to obtain more efficient production and in some cases they were close to the edge water and they were decreased to prevent too rapid influx of water. So a modification of the Brown Plan could affect to some extent these curves. I do not think it would be great. Supposing the Brown Plan factor were increased you would probably get a rise in these curves and you would also get a more rapid decline from there on.

Q Yes, I appreciate that?

A If the Brown Plan factor increased too much it might mean an actual reduction in the total amount of oil produced because it might not be as efficient.

THE CHAIRMAN: Anything further, Mr. Chambers?

.....

RE-EXAMINATION BY MR. CHAMBERS.

Q Just more or less of a recapitulation. As I understand it, Mr.Connell, you collaborated with Mr.Verne Taylor in making the report that was used a year ago for the Valley Pipe Line Company?

A That is correct.

Q You probably have the figures there? On the first page of this year's application, as I understand it, a year ago an estimate was made for the 1945 production that it would be 7,357,895 barrels. Do you remember that?

A That is correct.

Q And that was broken down to crude absorption and crude naphtha. Have you got those figures?

A Yes. The estimated crude oil production was 7,015,300 barrels; absorption gasoline was 335,295 barrels, and crude naphtha was 7,300 barrels.

Q You probably might have given it already but I would like you to give us the actual for 1945 that you got yesterday from the Conservation Board?

A Crude oil was 6,996,727 barrels.

Q Yes?

A Crude naphtha was 8,862 barrels. I think we can explain part of that difference at least to the estimates made for the gas cap withdrawals, the fact that the B.A. and the Gas and Oil Products did not start delivering gas to the Calgary market as soon as it was expected.

Q And the actual absorption gasoline figure was what?

A For 1945?

Q For 1945?

A 412,540.

Q And I also understand that in January 1945 an estimate was made

that there would be 18 wells,new wells, in 1945, is that right?

A That is correct.

Q And tell us what the actual was, and in order to refresh your memory, if you will turn to.....

Q I think there were 19 wells that were completed in Turner Valley.

Q Did they all come in as producers?

A No, there were three that were abandoned. There were fourteen wells drilled that are now delivering to the Pipe Line Company and one to the Gas & Oil Products. Okalta 22, which was not drilled to the limestone, was drilled to the shallow gas sands above the limestone, and it is still being tested.

Q They are working on Okalta yet?

A Yes.

Q It is not producing yet or delivering yet?

A No.

Q Thanks, Mr.Connell.

MR. CHAMBERS: I will call Mr.Constable.

.....

HENRY LEIGH CONSTABLE, having been duly sworn, examined by Mr. Chambers, testified as follows:-

Q Mr.Constable, as I understand it you are the secretary-treasurer of the Valley Pipe Line Company Limited?

A That is correct.

Q You succeeded the late Mr. Young in that position, when?

A The 15th of February, 1945.

Q Now you have had prepared and compiled on behalf of the Company an application to the Board dated December 12th, 1945?

A Yes sir.

Q You have a copy of it there before you, have you?

A Yes sir.

MR. CHAMBERS: I would suggest, Sir, that we might read the narrative part and probably some of the figures, we do not have to read them all?

THE CHAIRMAN: No.

Q MR. CHAMBERS: Will you just proceed and read the application?

A This is addressed to the Chairman of the Board of Public Utility Commissioners, and is an application on behalf of Valley Pipe Line Company Limited for determination of pipe line rates for 1946 and/or following.

SUMMARY OF 1945 OPERATIONS

This has been discussed just a moment ago.

(i) Drilling and Production

In its previous application to the Board, dated January 25th, 1945, the Company estimated the total 1945 production from the Turner Valley Field would be 7,357,895 barrels, as follows:

Crude Petroleum	7,015,300	bbls.
Absorption Gasoline	335,295	"
Crude Naphtha	7,300	"
Total	7,357,895	"

This estimate was based on a letter, dated the 24th day of January, 1945, from Vernon Taylor, Production Superintendent of Royalite Oil Company, Limited, directed to S. G. Coultis, President of Valley Pipe Line Company Limited, the original of which letter was attached as Schedule II to the Company's application to the Board, dated January 25th, 1945, (which application is hereinafter referred to as "the 1945 application")

Mr.Taylor in his 1945 estimate assumed that 18 new crude oil wells would be brought into production during the year 1945, of which 13 would be drilled or operated by Royalite Oil Company Limited and 5 by independent companies. During the said year 1945 there will have been a total of 19 crude oil wells drilled in Turner Valley, particulars of which are as follows:

Wells drilled, delivering to Valley Pipe Line Co.Ltd.	14
" " " to Gas and Oil Products	1
" " but not producing as at Dec. 1,1945 (Okalta 22)	1
" " and abandoned	3
	19

The above-mentioned abandoned wells were Calling Valley, New Valley and Foothills No. 22.

The actual 1945 Turner Valley production will have amounted to 7,422,330 barrels, as follows:

Actual production for the first ten months, as supplied by the Conservation Board:

Absorption gasoline	334,815 bbls.	
Crude oil production including crude naphtha	5,909,243 "	
	6,244,058 "	6,244,058 bbls.

Estimated production for November and December, 1945:

Absorption Gasoline 2 x 36,125 (October Actual)	72,250 "	
Crude Production 2 x 553,011 (October actual)	1,106,022 "	
	1,178,272 "	1,178,272 "
Total		7,422,330 "

THE CHAIRMAN: I suppose if we have the actual figures they should be submitted.

MR. CHAMBERS: Yes. As a matter of fact I have a revision and probably we can use those figures as we go along. I have a copy of that. Have you some extra copies?

A They are all down there, sir. I have one for myself.

Q Just a minute till I get the others. You had better give us the actual then?

A All right, sir. The actual 1945 Turner Valley production amounted to 7,422,061 barrels.

Q Mr. Connell has already given us a breakdown of that?

A On the first page, yes sir.

Q He has just read it into the record. Now then?

A Pipe Line Throughput.

Q Yes?

A (ii) Pipe Line Throughput

In its 1945 application to the Board, the Company estimated that its total 1945 throughput would be 6,722,895 barrels, which figure the Board adopted in its judgment dated the 6th day of March, 1945, as the basis for its Order #10184.

Now I can give you the correction.

Q Yes?

A The Pipe line throughput for 1945 was 6,773,184 barrels.

(II) ESTIMATED TURNER VALLEY PRODUCTION FOR 1946-52.

Annexed hereto as Schedule I is a letter, dated the 5th day of December, 1945, from Gordon A.Connell, Chief Petroleum Engineer for Royalite Oil Company Limited, directed to S. G. Coultis, president of Valley Pipe Line Company Limited, in which he estimates the total production from the Turner Valley field for the years 1946-52, both inclusive, to be 23,470,025 barrels, of which 15,487,950 barrels will be produced in the years 1946-48, both inclusive, as follows:

1946	6,293,705	bbls.
1947	5,137,450	"
1948	4,056,795	"
	15,487,950	"

(III) ESTIMATED THROUGHPUT FOR THE YEARS 1946-48.

(i) Previous Throughput

Schedule II hereto annexed shows that for the years 1939-45, both inclusive, (the 1945 figures being estimated) the Company's actual throughput has amounted to 93.44545% of the total Turner Valley production. It is also to be observed that the Company's 1945 throughput (6,812,895 barrels -

paragraph (II) above) was actually 91.78917% of the Turner Valley 1945 production (7,422,330 barrels - paragraph (II(i)) above).

Q MR. CHAMBERS: Would you turn to Schedule II, Mr. Constable. As I understand it your estimated throughput in the future years 1946 to 1952 and followng will be 93.44545% of the production, of the estimated production?

A That is right.

Q And that is notwithstanding the fact that the actual 1945 throughput was about 91.78% of the production?

A That is right. I might add that I made a calculation this morning using the corrected production and throughput figures for 1945, and the percentage works out to 93,42195.

Q It still worked out at 93%?

A Yes.

Q That is fine.

A Yes.

(ii) Future Throughput

For the purpose of this application, the Company assumes and estimates that its throughput for future years will be 93.44545% of the Turner Valley production in the respective years, and, based on the figures set forth in Schedule (II), the Company estimates that its total throughput for the years 1946-48. both inclusive, will be 14,472,783 barrels, as follows:

1946	5,881,180	bbls.
1947	4,800,713	"
1948	3,790,890	"
Total	14,472,783	"

(IV) TOTAL ESTIMATED FUTURE THROUGHPUT

In view of the fact that a substantial proportion of its investment will remain undepreciated as at the end of the year 1945, and in view of the diminishing annual throughput, the Company submits that, at this time, a review should be made of the probable remaining reserves, upon which the future throughput is dependent.

The previous Orders of the Board, fixing the Company's rate, have been predicated upon a total overall throughput of 108,000,000 barrels, and on that basis there would remain an estimated future throughput, as from January 1st, 1946, of 51,019,801 barrels, as follows:

Total estimated throughput as from January 1st, 1939	108,000,000 bbls.
Less throughput - 1939-45 inclusive	56,980,199 "
	51,019,801 "

The Company urges and submits that, for the purpose....

Q Have you the correction for that?

A No, I have not that correction. It is a very small correction though.

Q It could easily be made?

A Yes.

The Company urges and submits that, for the purpose of fixing its future depreciation allowance, the remaining future throughput, as at January 1st, 1946, should be taken to be not more than 21,931,668 barrels, being 93.44545% of the total estimated Turner Valley production of 23,470,025 barrels for the years 1946-52, both inclusive.

The Company submits that, in view of the information now available, the remaining Turner Valley reserves (upon which

its future throughput is to be predicated) should not exceed 23,470,025 barrels.

Gordon Connell's estimate (Schedule I, annexed hereto)

	1946-1952	
Crude Oil	21,704,285	barrels
Crude Naphtha	48,900	"
Absorption Gasoline	1,716,840	"
Total Production	23,470,025	

Ralph Davis' Estimate (Exhibit 38 - Natural Gas Hearing)

	1945-1952	
South end (Exhibit 38, p.9)	11,200,000	barrels
North end (Exhibit 38, p.15)	15,530,000	"
	26,730,000	"
Less 1945 Production	7,422,330	"
Total 1946-52 Production	19,307,670	"

Stanley J. Davies' Estimate (Exhibit 40 - Natural Gas Hearing)

	1945-1960	
B.A.Area (Exhibit 40, p.22)	3,323,628	barrels
G.O.P. " (Exhibit 40, p.26)	2,307,432	"
Madison No.3 Area (Exhibit 40,p.32)	8,243,340	"
North Turner Valley Area (Exhibit 40, p.39)	15,030,636	"
	28,905,036	"
Less 1945 Production	7,422,330	"
Total 1946-60 Production	21,482,706	"

E. W. Krampert's Estimate (November 15th, 1943 - Exhibit 28 - 1944 Hearing)

	1944-1952	
Crude Production (Exhibit 28, p.10A)	34,827,860	barrels
Absorption Gasoline (Exhibit 28, p.10G)	2,375,343	"
Naphtha (Exhibit 28, p. 10C)	720,000	"
	37,923,203	"
Less 1944 and 1945 Actual	15,748,644	"
Total 1946-52 Production	22,174,550	"

It will be observed that the average of the above estimates (including that of S. J.Davies to 1960) is 21,608,740 barrels.

It is also to be observed that the following are the over-all estimates of various petroleum engineers as to Turner Valley recoverable Crude Reserves:

Gordon Connell	88,046,854	bbls.
Ralph Davis	86,072,851	"
E. W. Krampert	86,736,531	"
Stanley J. Davies	88,247,887	"
Dr. B. B. Boatright	108,000,000	"

MR. CHAMBERS: Now on accounting, 1945, would the Board prefer to read the actual figures?

THE CHAIRMAN: Yes.

WITNESS: All right. 1945 accounting and this is listed, Operating Expenses estimated by the Board in March 1945, Decision, $334,420.00.

THE CHAIRMAN: I think I would rather have that estimated by the Company and adopted by the Board, Mr. Constable?

A Yes sir. Well to compare with that the actual is $361,006.74.

	1945 Estimated by Board in March 1945, Decision	Actual
Operating Expenses	$334,420.00	$361,006.74
Sundry & Miscellaneous Expenses	46,683.00	50,243.47
	$381,103.00	$411,250.21
Depreciation on Unit Method (108,000,000 basis)	86,472.00	82,134.32
Return - 8% on $963,106.87	77,049.00	77,049.00
Return - 8% on one half 1945 Capital Additions	3,153.00	644.29
Income and Excess Profits Taxes 40%	53,468.00	51,690.58
	$601,245.00	$622,768.40
Throughput	6,722,895 bbls.	6,773,184 bbls.

The Company' net 1945 return (after allowance for 1944 deficit, 1945 operating expenses, depreciation, and income taxes, and net profit on Line loss deduction) was $5,487.48 less than it was entitled to receive under the Board's said Order No. 10184, as follows:

Gross 1945 Income from rates $622,610.97

Q MR.CHAMBERS: Does that include line loss deductions too?

A Yes sir.

Gross 1945 Income from rates		$622,610.97
Less:		
Operating Expenses	361,006.74	
Sundry Expenses	50,243.47	
Depreciation	82,134.32	
Income Taxes	51.690.58	545,075.11
1945 Net Return actually earned from rates		77,535.86
1945 Permitted return on Rate base		77,693.29
Deficiency under Permitted Return		157.43
Add 1944 Deficiency		5,330.05
		5,487.48

MR.CHAMBERS: Now I think you next deal with Capital Additions?

A Yes sir.

Q THE CHAIRMAN: That is going back to Page 7?

A Page 7, yes sir. Mr. Chambers, there was a mistake there in 1946. It should be $10,000.00 instead of $1,000.00.

Q MR. CHAMBERS: That is on page 18?

A Yes. Under Contingency there, 1946, we should have had $10,000.00 instead of $1,000.00.

Q That should have been $65,925.00?

A $65,925.00 is correct. That makes a total on Page 7 of $142,925.00.

MR. CHAMBERS: If the Board pleases, I will not have the witness go into the details. If anyone wants information on that, Mr. Coultis will be here and be able to give that.

Q MR. McDONALD: What is the new total?

A $65,925.00.

RATE BASE FOR YEARS 1946 to 1948

For the reasons hereinbefore set forth, the Company submits that its rate base for future years should be calculated on the basis of an over-all throughput of 75,789,715 barrels (as computed in Schedule II) rather than 108,000,000 barrels.

If that procedure is followed, it will mean that the Company's rate base in each successive year will be decreased to a much greater extent than it would be if the108,000,000 figure is used.

Such accelerated rate of declining the rate base will also result in a lesser amount being required for the rate of return and leave a minimum of capital charges (depreciation

and return) to be paid in the latter years of small throughput.

Annexed hereto as Schedule IV is a statement showing the future rate bases of the Company for the years 1946 to 1948 respectively, calculated alternately on the basis of 108,000,000 and 75,789,715 barrels.

Q MR. CHAMBERS: Will you turn to that. Schedule IV is a long one on page 19. As I understand it, the difference is caused by the fraction for depreciation being larger by taking the 75 million odd figure than if you take the 108 million figure?

A That is correct, sir.

Schedule V annexed hereto shows particulars of the computation of the depreciation referred to in Schedules IV and VII.

From Schedule VII it will be observed that for the year 1946 to 1948, both inclusive,

(a) the total depreciation to be recovered by the Company would be as follows:

	108 million basis	75,789,715 basis
Total	$208,167.41	$447,468.30
Remaining rate base for 1949	802,455.44	553,368.52

(b) the total net return to the Company chargeable in the service rate, would be as follows:

	108 million basis	75,789,715 basis
Total	$213,838.60	$191,864.73

(c) the total income tax, chargeable in the service rate, would be as follows, for the three year period:

108 million basis	75,789,715 basis
$142,559.06	$127,909.82

(d) the total net saving in income tax and net return would be $36,623.11, as follows:

	108 million	75,789,715
Net return to Company	$213,838.60	$191,864.73
Income Taxes	142,559.06	127,909.82
	$356,397.66	319,774.55
	319,774.55	
Net Saving	$ 36,623.11	

Q MR. CHAMBERS: That saving would be for those three years?

A Right.

Q There would still, as I understand it, be a saving for the future because your rate base for 1949 would only be five hundred and fifty-three thousand dollars odd as compared to $802,000.00?

A Yes sir.

FUTURE OPERATING EXPENSES

Annexed hereto as Schedule VI is a statement showing the Company's actual (December estimated) 1945 operating expenses and its estimate of such expenses for each of the years 1946 to 1948.

It will be noted that the statement shows total operating expenses as follows:-

1945	$403,825.67
1946	356,485.00
1947	328,570.00
1948	303,450.00

Q MR. CHAMBERS: You have the actual now?

A Yes. December estimates can be struck out, It will be noted that the statement shows the actual operating expenses for 1945, a corrected figure of $411,250.21. For 1946 $356,485.00; for 1948 $303,450.00.

Now Future Service Rate, and this is in the substitution here.

FUTURE SERVICE RATE

By reason of the deficit of $5,487.48, as at December 31, 1945, the estimated future required revenues for each of the years 1946 to 1948 on the alternative bases of 108,000,000 and 75,789,715 barrels throughput will be:

	1946	1947	1948	Total
(108,000,000 basis of depreciation)	$562,144.40	$517,905.75	$478,507.40	$1,558,557.55
(75,789,715 basis of depreciation)	654,536.18	584,389.31	522,309.84	1,761,235.33

After deducting 570,797 barrels as the amount of the January 1946, throughput and $52,798.75, the January, 1946, revenue therefor, the estimated future required revenues for the last eleven months of 1946 and all of the years 1947 and 1948 would be:

	1946	1947	1948	Total
(108,000.000 basis of depreciation)	$509,345.65	$517,905.75	$478,507.40	$1,505,758.80
(75,789,715 basis of depreciation)	601,737.43	584,389.31	522,309.84	1,708,436.58

and on the basis of the following throughput:

1946 throughput	5,881,180 bbls.
less Jan. 1946 throughput, (That is estimated)	570,797 "
	5,310.383 "
1947	4,800,713 "
1948	3,790,890 "
Total 11 months, 1946, and all 1947 and 1948	13,901,986 "

Q MR. CHAMBERS: Mr.Constable, you said January 1946 estimated 570,797. As I understand it that is actual all except the remaining days of the month?

A That is right, sir.

Q That is actually down to when?

A To Sunday morning.

The following service rates would be required as from February 1st, 1946:

	1946 (11 mos.)	1947	1948	Feb.1,1946 to end of 1948
(108,000,000 basis)	9.5915¢	10.7881¢	12,6225¢	10.8312¢

Q MR. CHAMBERS: That is the average?

A That is the average.

(75,789,715 basis)	11.3313¢	12.1729¢	13.7780¢	12.2892¢

THE CHAIRMAN: I think this will be a convenient place to adjourn, Mr.Chambers.

MR. CHAMBERS: I would appreciate it very much.

(At this stage the Hearing was adjourned until 2 P.M.)

.....

Q MR. CHAMBERS: Mr. Constable, when we adjourned before lunch I think you had gotten down to the Line Loss Allowances on page 10, is that right?

A That is correct.

Q Will you please proceed?

A Starting at Line Loss Allowances on page 10 of the original brief. The Board in its said Order No. 10184 continued unchanged the line loss deduction rates of ½ of 1% and 1½% for Crude Oil and Absorption Gasoline respectively. Now we substitute the actual figures for 1945 and show:

Line Loss Allowances

The actual figures for 1945 show a net profit of $7,315.61 in respect of 1945, as follows:

Crude gain over ½ of 1% allowance, 6,284 barrels	$10,614.02
Less Absorption Gasoline loss over 1½% allowance, 987 barrels	3,298.41
	$ 7,315.61.

The said amount of $7,315.61 is included in the company's revenues and reflected in its net profit as shown in Clause 5 above and as referred to in Schedule 6.

Q I understand that has been taken in and credited and that that deficiency of $7,487.48 is after allowing for this credit of profits from the line losses, is that right?

A Yes, sir, that is right.

Q THE CHAIRMAN: This net profit would be changed to a deficit?

MR. CHAMBERS: Yes, that is a debit of $5000.00.

A HANDLING AND LOADING CHARGE

The Board, by its said Order No. 10184, approved and authorized a rate or charge of 2½ cents per barrel

for handling and loading into tank cars and tank trucks at Calgary.

The Company, during 1945, continued its previous arrangement with Imperial Oil Refineries at Calgary, which owns and operates pumping and loading facilities for this purpose, the Pipe Line Company itself owning no such facilities.

The said arrangement, which has been in effect since 1939, between Imperial Oil Refineries and the Company provides that the Pipe Line Company pays the said 2½¢ rate to Imperial for providing all the services and equipment requisite for such handling and loading with the result that the Pipe Line Company makes no profit nor assumes any loss with respect to such operations.

The receipts and disbursements of the Company are, therefore, not included in the annexed statements of revenues and expenses.

Q That is as to the 2½¢?

A Yes.

Q Because one offsets the other?

A One offsets the other.

SUBMISSION

The Company, therefore, makes application for, and asks, that a service rate of 12¼ cents per barrel be fixed to be charged by it for all throughput as from and after January 1st, 1946, until further order of the Board.

MR. CHAMBERS: Perhaps I should interject here, in the way of explanation of the submission, that that obviously has to be amended in the light of the actual results for 1945 as we now know them. And then there is the question

of January having been practical. history by this time.

THE CHAIRMAN: Could I amend that by saying as arrived at by the Company?

MR. CHAMBERS: Yes, that is what we are asking for. Rather than pursue the matter further at this stage, that is all I have to ask Mr. Constable. Please answer my learned friend.

THE CHAIRMAN: Mr. McDonald?

.....

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. McDONALD.

Q I was interested in the operating expenses, Mr. Constable. I take it Schedule 6 shows the 1945 operating expenses for the 11 months and some estimate for December.

A That is quite correct.

Q And you corrected the total operating and administrative and general expenses, $403,825.67 to $411,250.21?

A That is correct.

THE CHAIRMAN: Where is that figure, Mr. McDonald?

MR. McDONALD: At the bottom of the first column.

THE CHAIRMAN: On the revision?

MR. McDONALD: Yes. $411,250.21 is on the first page of the revision.

THE CHAIRMAN: Yes.

Q MR. McDONALD: Have you available your estimates for 1945?

A Well, it is right here. That $381,000.00.

Q No, I mean the detailed estimate of . . . . .

A We have last year's brief here, yes, sir. I can get it.

MR. CHAMBERS: You are asking for the 1945 estimate.

MR. McDONALD: Yes, the estimate made last January. Can you pick out for me what was the main increase in expenses, in the operating expenses?

THE CHAIRMAN: That is over the estimate.

MR. McDONALD: Over the estimate, yes.

A There is an increase in, you want the large increases?

Q Yes, the large increases.

A Oil gathering lines, there is an increase of $13,000.00.

Q Yes.

A And in tank farm expenses, there is an increase of $23,000.00.

Q Yes, that would make up the majority of the deficiency.

A That will make up the majority of the deficiency, yes.

Q What were the additional expenses in oil gathering lines?

A Well I do not have that information here, sir.

Q What was the additional expense in the Turner Valley Tank Farm?

A That was caused by repair work that had to be done to some of our tanks.

Q To the extent of $23,000.00 was it?

A Yes.

Q What were the particulars of that?

MR. CHAMBERS: I think if my learned friend will agree, I think Mr. Coultis can probably deal with that phase. I will put him in next.

MR. McDONALD: He will have the figures?

MR. CHAMBERS: I do not know whether he will have the figures but he will tell you what it was all about.

Q MR. McDONALD: It was in the neighborhood of $23,000.00?

A Yes, I believe it was a little more than that. Mr. Coultis will explain it. As far as our figures here, the difference

shows as $23,000.00 between the estimate and the total cost.

Q These repairs were charged to, this expense was charged to repairs?

A Yes.

Q THE CHAIRMAN: So that if the repairs to the tanks cost more than $23,000.00, then but for that expense yours actual expenditure would have been below your estimate?

A That is correct, sir.

MR. McDONALD: That is what I was arriving at.

A Yes, sir.

Q The difference between your estimate and the actual expense was some unusual expense?

A Yes, sir.

Q That had not been foreseen?

A It was not foreseen, no.

Q You do not know whether that is so about the oil gathering lines?

A No, I would not like to say what caused the increase in the oil gathering lines, without analysis.

Q Were there any capital additions in 1945?

A Very few. $16,000.00 worth.

Q That was added to the rate base?

A Not yet.

MR. CHAMBERS: Sixteen thousand?

A Capital Additions?

Q Yes.

Q MR. McDONALD: On page 1 of your revisions, it shows capital additions of one-half . . . . . no.

A That is 4% on $16,000.00 one hundred.

Q MR. CHAMBERS: That is 8% on half?

A Yes, that is right, sir.

Q Yes, the total would be $16,000.00 for the year.

Q MR. McDONALD: So you have capital additions of $16,000.00.

A Right.

Q And that was added to the rate base?

A Yes, sir.

Q Now what is the relationship, Mr. Constable, between throughput and your operating expenses?

A You mean in percentage?

Q In 1945 you had an estimated throughput of 6,722,895?

A Yes.

Q Now in 1946 you will have an estimated throughput of 5,881,880 barrels. You have reduced your operating expenses. How do you work that out? On what basis?

A Well that is worked on operating conditions.

Q Yes.

A Each section was taken and analyzed and reduced as much as it was possible to do so.

Q Well what did you reduce, your labor?

A Yes.

Q And material supplies?

A Partly, yes.

Q And what about your administration and overhead?

A Well there is not a great reduction in it, is there?

Q Did you take a percentage for 1946?

A No.

Q You just took that item by item?

A Yes, that is right.

Q And did you do the same for 1947?

A Yes, we did.

Q Did you contemplate taking up any lines in those years?

A No, I do not believe so.

Q It was just the difference . . . . .

A In operating expenses.

Q In the difference of the number of times you attended at a tank, for instance, to take delivery?

A That is correct.

Q And the difference in the amount of mileage the trucks would run?

A Yes, those are factors.

Q Have you any basis on which we could work out the possible reduction in operating expenses through 1949, 1950, 1951 and 1952?

A We have not tried to calculate that at all.

Q Would it be, as I calculate your reductions here, you have a 20% reduction in operating expenses for a 33% decrease in throughput, roughly all the way through.

A Yes.

Q Do you think there is a limit to that?

A I believe there is.

Q Yes.

A But it is strictly an operating problem and I would not care to make a statement on it.

Q You have worked on these three years that are now forecast.

A I assisted in it, yes.

Q And in preparing the figures you took the recommendation of the operating men as to what labor and material they would require to do the job?

A That is correct.

Q And then you calculated out the time?

A Yes.

Q And other expenses. Now can you tell me in regard to these Employees' Benefits, I have roughly addded them up and beginning from Company's vacation expenses down to Group Hospitalization, roughly $20,000.00, that is over and above the Workmen's Compensation Board assessment?

A Yes.

Q Is this under a contract with your employees that you make these arrangements?

A I do not know whether you would refer to it as a contract. These benefits are provided by the Company.

Q Is it a term of the employment? Is it an arrangement with the Unions?

A Oh no, sir.

Q What is the vacation that is allowed, the term?

A This is the usual annual vacation for the employees.

Q How many weeks per employee?

A It depends on the service.

Q What is the rate?

A It is one week for each of the first two years. That is one week the first year and one week the second year. And after they have completed three years they get two weeks.

Q Does it go above that?

A No, it remains at two weeks.

Q The administrative staff would get two weeks?

A Two weeks, always.

Q Is that included in the vacation expenses?

A In that particular figure it is not. That is in the $7524.62.

Q Yes.

A No, it is down below there in that $55,000.00.

Q How many employees did you have on the payroll in the Operating Department in 1945, roughly?

A Approximately 100.

Q That would be in Turner Valley?

A Yes. I believe I would be safe in saying in Turner Valley. I do not have that information here.

Q Now Sick Benefit. Is this the company's contribution to the Sick Benefit Fund?

A It is payment made to employees while they are sick.

Q Is that a joint employee and company fund?

A No, it is distinctly a company policy.

Q That is a weekly allowance while ill?

A Yes, it is based that way or for the month, it does not matter. It is half pay.

Q And then this Thrift Plan Contribution, can you explain what that is?

A Well the Thrift Plan is a plan for saving to provide an annuity for each one of the employees, which the company assists in paying. The employee pays a certain percentage and the company pays a certain percentage and this represents the Company's costs.

THE CHAIRMAN: What are the percentages?

A They vary, sir. In 1945, the minimum as 3% and the maximum 13% for the employee; the company's portion, the minimum was 3% and the maximum 8%.

Q MR. McDONALD: The employee had the choice as to the percentage he would select for himself?

A That is correct.

Q And up to 8% the company would match his contribution?

A They did not match it. For the first 3% they matched it and for each 1% after that, the company put in one-half of 1%.

Q And this Employees' Welfare item, that is a donation to the local . . . . .

A Yes, just incidentals.

Q Can you explain the Employees Group Life Insurance?

A That is one of these Group Insurance policies where the employee pays part of the premium and the company pays the remainder.

Q And what part of the premium is carried by the company?

A I do not know the percentage right offhand, I cannot tell you.

Q Is it a limited amount per each certificate?

A Yes, for each $1000.00, the company has to pay their proportion.

Q Now Group Hospitalization, $2,196.86.

A That is on the same basis as the Group Insurance. The employee pays so much and the Company pays the balance.

Q What is the employees' contribution do you know, per month?

A Yes, for a single man it is 85 cents a month and a married man pays a dollar and a quarter and I believe it is 45 cents for each additional child. It has a limit, I have forgotten.

Q Does the Company pay a fixed amount, $2,196.86?

A No, that is in proportion to the employee application, I mean employees might come in in the middle of the year or other shorter periods. This is fixed for the time they are participants.

Q Is there any statutory enactment or regulation of the

Industrial Labor Board . . . . . .

MR. CHAMBERS: I do not think you should ask this witness that question.

MR. McDONALD: I thought he might know.

THE CHAIRMAN: He might know.

MR. CHAMBERS: I do not think his evidence would be of very much value one way or the other.

Q MR. McDONALD: Now if we get the administrative and general expense, Mr. Constable. You have a gross item of $55,016.61. What are the details of that?

A Well that includes administrative and office charges and salaries and as I mentioned in this some of the benefits are included in that last year.

Q Some of the benefits?

A Yes, pertaining to the administrative staff.

Q THE CHAIRMAN: That is $10,500.00 higher than the estimate?

A Well I cannot explain all of it. There is one item of $4,000.00 death benefits we had to pay which we did not anticipate at the first of the year.

Q MR. McDONALD: That was a death benefit?

A Yes.

Q In connection with the death of an executive officer?

A Yes sir.

Q That would be Mr. Young?

A Right.

Q What was the basis of making that payment?

A Well it is just the amount that is paid to an employee on his service with the company at the time of death.

Q Paid to his estate or to his widow?

A To his estate, whoever the beneficiary may be.

Q That is in the nature of a gratuity?

A It is distinctly called a Death Benefit.

Q Is that Company Policy, has it been done by Madison before as a company?

A You do not mean by Madison. I do not believe we had occasion to make any payment of this nature before.

Q It is a matter of policy of the Royalite Company then?

A Yes.

Q Do you know whether it is with the Imperial Oil Company, if they have a similar policy?

A Yes sir.

Q It has been established over many years?

A Yes.

Q $4000.00 would be roughly 12 months salary of the deceased party?

A Yes, it would.

Q Now could you read into the record the detail of the administrative account, how much is office expense and how much salaries?

A No, I cannot.

MR. CHAMBERS: We can get it over here.

A Yes, we can get an analysis if you wish.

Q MR. McDONALD: What I am trying to do is to gauge, Mr. Constable, what is going to happen in 1946, 1947, 1948, 1949, 1950, 1951 and 1952. So if we had the details you could provide that to us.

A Well our estimates are here. As I say we can get that information over at the office if you wish.

Q Well you will provide us that. Now what is your arrangement, Mr. Constable, in regard to joint services as

between the Madison Company and the Royalite Company. Have you any joint arrangement?

A Well, for example, sir, ...

Q Well we will take purchasing.

A Oh yes, we have an arrangement whereby the Royalite Purchasing Department do our purchasing and we pay them so much for each order placed.

Q You pay them in regard to the services rendered?

A Right.

Q What is the basis of your payment?

A I believe it is a dollar seventy-five an Order. They place the order and they follow it up. A lot of the orders have to go through the Purchasing Department in Toronto and on to the States possibly.

Q Is it the same charge?

A The same charge.

Q The same charge for foreign orders?

A No, I should not say that. It is the same charge from this office. There is a further charge for foreign purchases from Sarnia.

Q What is the basis of that charge?

A That is based on the orders placed also.

Q That is per order?

A I believe so. Now I do not want to be sure on that one. The amount is very small and I could check up.

Q Well, I mean would the amount of the order have anything to do with it? Would it be a percentage of the value?

A No, the amount of the order has nothing to do with it.

Q Now, Mr. Constable, have you a profit and loss statement of the Madison Company?

A No. This is our only statement to be submitted right here.

Q The reason I was interested in it was I wanted you to explain to me how you arrived at your Income Tax payments.

A Payment of the Income Tax by the Madison Company?

MR. CHAMBERS: The Pipe Line Company.

Q MR. McDONALD: I am sorry, the Pipe Line Company.

A Do you mean provision for it or the amount paid.

Q Yes, what did you pay and how did you arrive at it?

A We just arrived at it by the percentage which the company had to pay on the earnings. In this case, it was brought out that our earnings are $77,500.00 and we pay 66-2/3 of that as Income Tax.

Q That is the figure then, this figure you have . . . . .

A $51,690.00 shown as Income Tax . . . . .

Q You have set up in this figure for 1945 of $56,805.74.

A That was an estimate.

Q The actual figure is?

A $51,690.58.

Q THE CHAIRMAN: That is what you have actually paid?

A No, sir, that is what we will have to pay. Our taxes do not have to be paid until the end of June.

Q MR. McDONALD: Well what I was getting at is what did you actually pay in 1944? What did you pay for 1944?

A I haven't that information here.

Q THE CHAIRMAN: Get us the figures, Mr. Constable, and it will be all right. The actual payments that you made for Income Tax for the years 1939, 1940, 1941, 1942, 1943 and 1944. The amounts actually paid.

MR. McDONALD: When I get that I can continue that cross-examination.

THE CHAIRMAN: Yes, 1939 to 1944.

Q Perhaps there is one other point I might ask you here, do the Valley Pipe Line pay income tax as an individual legal entity or does it pay income tax on the basis of a consolidated income tax return for all the integrated companies?

A Mr. Humphries maybe should answer that question. I have never worked on the income tax.

MR. CHAMBERS: My understanding is, subject to confirmation, that they have paid as an individual for all past years. The other phase was under consideration for 1946 due to certain Income Tax rulings or questions raised but there has been no decision made yet as to how it is to be done. If that is not correct, sir, I will take means to verify it and correct it tomorrow, if it is not correct.

THE CHAIRMAN: I can see the point that Mr. McDonald is trying to reach and that is should your rate of return be 8% per annum plus 40% or should it be 8% per annum with your income tax allowed as an operating charge for the exact amount you paid. There might be a difference between the two.

MR. CHAMBERS: I think I know what Mr. McDonald is after, and, as a matter of fact, the income tax that the company pays is actually considerably more than the amount shown in this figure, more than 40%.

THE CHAIRMAN: Then you must have made more money than you are thinking you have.

MR. CHAMBERS: No, sir, it arises out of the write-up of the valuation by the McGillivray Commission and in other words the Income Tax will not allow the depreciation that is shown here so as a result the company pays more

income tax and the shareholders bear that. So that so far as the shareholders are concerned, they do not make 8% on account of income tax. The figures will show that when we get them for you.

Q MR. McDONALD: There is one other thing you might get if you cannot tell me now and that is how many joint employees have you on the payroll. How many are employed both by the Valley Pipe Line Company and one or other of the subsidiaries of the Royalite Company?

A Well we have not any joint employees.

Q I mean who work for both concerns and their salaries divided.

A Are you referring to your question of a few moments ago where you used the purchasing department as an example?

Q No, that is a service charge, I understand, that the Purchasing Department makes against you.

A Yes.

Q I am thinking now of your engineering staff or mechanics or anything of that kind.

A I cannot recollect any at the moment. If there are any we will let you know.

Q Well I want to know.

MR. CHAMBERS: Mr. Coultis will deal with that.

Q MR. McDONALD: There is another thing. Can you tell me, in making up these estimates, you have allowed for fuel and power.

A Yes.

Q You purchase your fuel and power from the Madison Company is it now?

A Part of it, yes.

Q Can you tell me what the expense for 1945 was for the purchase of power, both steam, gas and electricity from the Madison Company?

A No, sir, I have not that information here.

MR. CHAMBERS: We will get that.

Q THE CHAIRMAN: I was just thinking, Mr. Constable, on that question of Income Tax. Mr. Chambers has told us you probably pay more than the amount estimated so that the actual amount you pay might not be of any assistance to us. You would have to get the relative amount as compared with the estimates you made during the year. Would not that be the proper way?

A Well we could provide the income tax.

Q You see my point, Mr. Humphries?

MR. HUMPHRIES: Mr. Chairman, this $51,690.58 is exactly 40% of the profits. It is just a theoretical figure, it has nothing to do with the income tax returns.

MR. CHAMBERS: Is it not predicated, sir, on it being allowed in that return of 8%?

THE CHAIRMAN: Yes.

MR. CHAMBERS: In order to make that, you must hand out so much more to the Income Tax.

THE CHAIRMAN: I want to be sure you are not making a profit on your income tax, that is all.

MR. CHAMBERS: No. Well our income tax estimates here have been based on the actual. They are applied to the return figures. I think if they are checked you will find they bear 40% exactly on the return at 8% plus 40% taxes.

MR. HUMPHRIES: This figure of $51,690.58 is exactly

40% of the net profit before income tax. In other words it is 66-2/3% of $77,535.00 and it is 40% of $129,425.00 which is the income tax plus the net return added together.

THE CHAIRMAN: I think perhaps I had better ask you, Mr. Humphries and Mr. Baines, to get together on that.

MR. HUMPHRIES: I think we could soon settle it, Mr. Baines and myself.

THE CHAIRMAN: Do not bother about that at the moment, Mr. Constable. Mr. Baines and Mr. Humphries can settle that.

MR. McDONALD: If they would advise me what they arrive at.

THE CHAIRMAN: Quite so.

MR. McDONALD: I have some ideas about income tax. If we can get the facts so that we can use them in the future as to what goes on in regard to handling these returns plus income tax.

THE CHAIRMAN: Yes.

MR. McDONALD: In other words we are using this company as a whipping post as it were.

THE CHAIRMAN: I do not think Mr. Coultis likes that a bit.

MR. McDONALD: I think that is all. On matters of policy, we can ask Mr. Coultis about them.

MR. ARNOLD: I have no questions, sir.

MR. CHAMBERS: I do not think I have anything further. We will get this other information, and Mr. Constable will be here and available tomorrow.

THE CHAIRMAN: Well, I have quite a number of questions that have occurred to me but quite frankly I am not in a

position to ask them yet.

MR. CHAMBERS: He will be back in the box again. Maybe there is something on which he will be required to get some more information.

THE CHAIRMAN: For instance, you just mentioned the fact that administration expenses were estimated for this year at $44,500.00 and they actually amounted to $55,017.00, so that they actually exceeded the estimate by $10,517.00. Approximately $4000.00 of that is explained by the payment to the late Mr. Young's Estate but there is still $6,475.00 to be accounted for. I just wondered what made that up. We find the throughput is going down, the operations of the company are becoming smaller, and yet the administration expenses exceed the estimate by 25% approximately and I think we should know why. Now I happen to know about the increase in the Tank Farm expenses and that is the Hortonspheres. Do you know what the exact amount of the cost of repairing the Hortonspheres was, Mr. Constable? If you do not, you will perhaps get it for me.

A I will get it for you. I did not bring it with me.

Q Well you can get that, the exact cost. Did you have any mental anguish as to whether that should be charged to administration or to capital?

A The cost of the Hortonspheres?

Q Yes.

A It was administration, we charged it to operating.

Q Did you have any anguish in your mind as to whether it should be charged to capital or to operations?

A No sir, it seems to be an operating charge.

Q You had no doubt about it in your own mind at all, did

you. You just said that is operating and put it there that way.

A Well it was discussed a little.

Q Yes, I think it would be. I suppose Mr. Coultis is the one who could answer these questions better than this witness. Now Mr. Constable, you have a reserve fund of $40,000.00 set up to take care of a major disaster. You remember that?

A That is correct, sir.

Q How do you handle that? Do you have it invested at all?

A Yes, sir.

Q In what?

A In bonds.

Q And that is shown in your income, is it?

A Yes, sir.

Q Has the income tax department made any assessment for those years that we discussed? I know they were very far behind the last time we had a Hearing.

A Yes, an assessment has been made up to the end of 1943.

Q Well that is all at the moment, Mr. Constable, thank you. It may be that I will want some more information tomorrow, after I have gone over the other evidence. In the meantime, thank you. Unless someone else has anything?

MR. CHAMBERS: Nothing at the moment. I will call Mr. Coultis.

.....

SAMUEL G. COULTIS, having been duly sworn, examined by Mr. Chambers, testified as follows:

Q Mr. Coultis, you are the President of the Valley Pipe Line Company Limited?

A Yes, sir.

Q And have been since its formation in 1939?

A Yes, sir.

Q First of all would you tell us in a general way about the nature of this repair job or maintenance job to the Hortonsphere tanks?

A Yes sir. Two Hortonspheres, When built they are of entire welded construction. These tanks were constructed by the Horton Company of Canada. Upon completion, they were subjected to Provincial Government Boiler Inspection Department's inspection and were passed and they have operated in the neighbourhood of three years. About a year ago, there was a very severe explosion and fire at Cleveland.

Q Cleveland, Ohio?

A Cleveland, Ohio, where tanks of this nature were involved. I understand that some of the large oil companies in the United States commenced a very rigid inspection of similar tanks and upon that inspection internal defects as well as external defects of the welding were discovered.

Q By the way, Mr. Coultis, Hortonspheres are used to store Absorption gasoline, is that right?

A Yes sir.

Q All right.

A It was thought advisable to inspect our two tanks and this inspection was carried on during the past summer. The

method of inspection was to trepan the welded seams, particularly at junctions. The trepanning process consisted of taking a button or a sample out of the weld and after boiling that sample in acid a thorough inspection was made of the internal structure of the welds. Several of these welds were found to be defective and in order to prevent a serious explosion it was decided to re-weld practically the entire tank. This entailed a great deal of expense. It was an expensive job because it was necessary to remove the welding both inside and outside of the tanks and re-weld the seams. The work proceeded and these seams after cutting out were re-welded and the tanks are now back in service. It required approximately three and a half months both in inspection and repair.

Q You have heard the Chairman's question to Mr. Constable as to the decision that this item should be charged as an expense rather than capitalized. Can you tell us anything about that?

A My opinion is that it should be charged to expense.

Q Why?

A Because the tanks had been in operation for approximately three years. Any guarantee given by the people who sold the tanks and constructed the same was no longer in effect and it was purely a matter of repair.

Q Repair and maintenance?

A Yes.

Q That is all I have on that point. Is there anything else you want to tell us on your own as to the Hortonspheres that occurs to you?

A I do not believe so. I feel the tanks now are in safe, workable condition and they have again been inspected by

the Provincial department.

Q Can you tell us in a general way about the matter of gathering lines? As I understand it, when a new well comes in your Company makes an extension to that new well, is that right?

A Yes, sir, when necessary.

Q As I understand it, you do not wish to incur the expense until production from the well is assured?

A No, sir.

Q I would like you to enlighten us on this, according to the report on the reserves and the drilling program, the probability is that the number of wells drilled this year is relatively few. Does the probable location of those new wells involve a larger average cost per extension per well, just give us a general idea.

A Every well that is completed, and there were 16 wells completed that were producers in 1945, one of which did not deliver to the Valley Pipe Line, that increased the number of wells to be checked and the number of points from which we took delivery of oil by that number, meaning that gaugers both for inspection and gauging purposes, had to call on those wells and it was also necessary to check up in many instances and maintain and operate those pumps.

Q What I am getting at is this, are these probable new wells so located that they might be in what we call an outlying place that you might have to make a fairly long extension to them or larger than the average extension?

A Certain wells, yes, sir.

Q Certain of these projected wells. For instance, we are proceeding on the assumption there are going to be so many

wells drilled in 1946.

A Yes.

Q Are any of these outlying wells that would take a fairly long extension?

A Other than the two Home wells now drilling in the North end there are not any that I am aware of at the moment that will take an exceptionally long line, but we have no assurance where wells will be drilled by independent companies other than that drilled by the Royalite and affiliated companies.

Q As I understand it, in estimating your capital additions as shown in Schedule 3, you have tried to size up the probable locations of those new wells?

A Yes, sir. We have gathered all the information available when making up our estimate for 1946.

Q Now something was said about line losses, that is this account to cover a major loss. As I understand it from Mr. Constable, that sum is invested in Dominion Government bonds?

A Yes, sir, at 3%.

Q And the 3% you get from that is credited to general revenue?

A Yes, sir.

Q Have you had any line losses or breaks at all during 1945?

A We have had breaks throughout the year, none of a very serious nature. We had one serious break this month.

Q In January?

A Yes, we lost 1185 barrels in that one break of a field gathering line, owing to the line splitting. We had a break in the main trunk line last year. Fortunately the break was close to the plants and it was soon discovered.

Q I am going to ask you to look at Schedule 3, which is page 18 of Exhibit No. 2, which is an estimate of capital expenditures.

A Yes.

Q For the three years, 1946, 1947 and 1948.

A Yes.

Q Now I have not anything particularly in mind but I thought probably you could give some general idea to the Board as to how these are arrived at and I take it you are the man responsible for the figures.

A In 1946, sir, we show an item of $2000.00 and that heading is "Terminals". The heading includes connections and additions at the main pump station, trunk lines and also branch lines if required in Calgary. That is merely $2000.00 to cover any contingency that might arise over that part of our plant. Item 2, Pipe Lines, $36,225.00.

Q For 1946?

A For 1946. That is to take care of all pipe line requirements that may arise.

Q Primarily in connection with new wells?

A. Yes. Being 2 inch, 3 inch and 4 inch gathering pipe lines to take care of the production of the oil from wells to be drilled by the Royalite, the Imperial Oil and subsidiaries and also the wells to be drilled by independent producers in Turner Valley and adjacent areas throughout the year 1946.

Q Would this be a fair way to put it, in the light of your experience you have been actually connected with the Valley since crude oil was first discovered and in the light of information you have as to probable new wells,

that is your estimate of the amount that should reasonably be included to take care of the situation for this year.

A That is my estimate after consultation with the Field Superintendent and our resident Engineer in the field. The next item is pumping equipment and we are only asking there for $5,000.00 to be set up and $5,000.00 is not sufficient to buy one complete pumping outfit but may be required to buy either an engine or a pump. Automotive Equipment, $10,200.00, is to cover all requirements for Automotive equipment both trucks, tractors or automobiles. Miscellaneous, that covers tools, everything new required in fire equipment, engineering and laboratory equipment, $2,500.00. Contingency, $1,000.00, is to meet any contingency that may arise that we have not provided for otherwise in this budget. The same applies to 1947 and to 1948.

Q Mr. Constable was asked a question whether you have any joint employees. That is, as I understand it, those who work part time for the Valley Pipe Line Company and part time for Royalite or some other affiliated company. Can you tell us about that?

A Mr. Chambers, in answering that item you do not mean employees who are operating utilities?

Q Well, you have no utility employees on your payroll?

A No, but we purchase . . . . .

Q What I am getting at, anybody on your payroll, the Valley Pipe Line payroll?

A Not that I know of, sir.

Q In other words, your administrative staff, yourself and Mr. Constable and the gentlemen and ladies that are on

the administrative staff work full time for the Valley Pipe Line and render no service to other companies, is that right?

A Yes, sir.

Q The same way with your employees in the field?

A I am quite satisfied that is correct, sir. I have no one in mind that performs a dual service.

Q And as far as the service by way of electricity and steam and matters of that kind, you pay for the service on the amount of steam or electricity actually rendered?

A That is right.

Q This question of purchases, as I understand it you make your purchases through Royalite or an affiliated organization?

A I would like to qualify that, sir, and say the main purchases.

Q Yes.

A Our employees, our Field Superintendent is authorized to make certain purchases direct but the main purchases are made through one purchasing department which is Royalite. We make every endeavour to lump these purchases, not buying in small quantities. Neither do we buy in large enough quantities to pile up existing amounts, but to keep that purchasing per unit down.

Q Mr. Coultis, I wonder if you would give us your opinion on this, and if you can give us any specific examples it would be helpful, as to whether your company pays more or less by buying as it does than it would if it was buying as any separate entity doing its own buying from wherever you can get it.

A We consider it more economical to buy it through the

Purchasing Department which is purchasing large quantities of material.

Q And this is right, that the Purchasing Department does not charge you any percentage write-up over and above what they buy for, is that right?

A Oh no, sir. They charge us a commission, a certain amount per order regardless of the size of the order.

Q It is not based on a percentage of price?

A No.

Q It is based on so much per order?

A That is right.

Q And as I understand it, from what Mr. Constable said, it is a fairly nominal amount?

A It is.

Q Per order?

A Yes, sir.

Q Now, Mr. Coultis, I wonder if you would tell us something about the employee relationship between the employees and your company. First of all, as I understand it, your company does not have a Government pension scheme, whereby employees pay so much into the Government and the company makes some contribution?

A No, sir.

Q But I do understand, you correct me if I am wrong, that your company and its affiliated companies deal with your employees or meet your employees through what is known as an Employees' Committee, is that right?

A We have an Industrial Council, sir.

Q Will you just tell us about that?

A Industrial Council is a joint council made up by an equal

number of selected and elected delegates. The employees hold an election and elect five members and we select five members to sit on that Board. The Field Superintendent, Mr. Trotter, acts as Chairman.

Q You are talking just about the Valley Pipe Line organization?

A Yes, sir.

Q I see.

A And wages or any matters that the Council wish to bring up for the benefit of working conditions or for the welfare of their employers are discussed at these meetings. They meet once a month.

Q Am I right in this, that certain of the conditions, general conditions surrounding employment are originated or emanate in the first place from that Council?

A A great many of them, sir.

Q In other words it is a species of collective bargaining between your company and its employees?

A That is right.

Q What about these items, some of which Mr. McDonald referred to, the expense of hospitalization and things of that nature? Group hospitalization and Life Insurance and so on?

A The Group Hospitalization Plan was put into effect by the Imperial Oil Company, which covers all subsidiaries in Canada. A single employee participates. If he is a married man he participates if he wishes and carries hospitalization benefits to cover his wife and one or more children and they pay in monthly to that benefit which is deducted from their cheque, after they have signified their willingness or wish to participate. That hospitalization plan is handled by the Confederate Life.

Q The Confederation Life.

A The Confederation Life Assurance Company. We also have employees' insurance. That is a Group Insurance Policy covering all employees who wish to participate and that is a Sun Life policy.

Q Would you tell us the history of the Valley Pipe Line since 1939 as to strikes, walk-outs or lock-outs of your employees and so on?

A We have had no strikes, walk-outs, or lock-outs. We have never had that experience.

Q There has been no shut-down or time lost or anything of that kind due to these matters I have just mentioned, strikes and so on?

A No, sir.

MR. CHAMBERS: That is all I have in mind. If there is anything you have in mind specifically, Mr. Coultis, that I have not covered, will you volunteer it?

A I do not think there is anything, sir.

.....

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. McDONALD.

Q I take it the general purpose of these employees' benefits as a group is in order to insure continued employment and cut down your turnover of labor.

A Yes, I think that is one of the reasons, sir.

Q And generally to help maintain efficiency and continuity of your service?

A Yes, sir.

Q The only point that appealed to me, Mr. Coultis, about it was that it is a fairly large amount of money considering

A

the total operating expense. It is more than usual for the average employee just along these lines.

A I believe there are other companies, sir, that probably have as good a labor policy or benefit policy as this company, operating in Canada.

Q It may not be such a large item now but in the future it may be a considerable item of expense, say after 1950.

A Well that will decrease sir, your number of employees is bound to decrease and a faithful, well-trained employee may be very valuable at that time.

Q You really feel that the company is receiving a benefit from this generous policy?

A I do, very much, sir.

Q And will in the future.

THE CHAIRMAN: It is just a question of who should pay for it, the company or the producers of the oil.

MR. McDONALD: I was coming to that.

THE CHAIRMAN: I do not quarrel with the principle of being good to employees.

MR. CHAMBERS: After all, the company is only paying it because they thought they could give better service.

Q MR. McDONALD: There are no other companies, outside the Royalite Company, that have quite a similar policy or do you know?

A I would prefer not to discuss it. I have not studied other companies, sir, in detail.

Q MR. CHAMBERS: But in your group, the Imperial Oil and Royalite and Valley Pipe Line?

A We are all on a par, pretty well.

Q MR. McDONALD: You have practically the same type of benefits?

A Practically the same type.

Q I do not want to labor it at all, but would there be anything in this suggestion that maybe 50%, I am not talking of vacation pay, but of the other benefits, maybe 50% should be charged in operating expense and 50% borne by the shareholders, what would think?

A I think it should all be borne by the shareholders, because the shareholders, if you do not take care of your employees you would probably be faced with a walk-out that shuts the work down frequently and that would be expensive in the transportation of crude oil or petroleum products.

Q In other words, this is somewhat in the type of insurance for continued performance of a public utility?

A I feel so, sir, I think it is good insurance.

Q Now can you tell me about the working capital of your company right now. What is the amount carried on the books for working capital? I mean the amount set up in the 1944 rate base, was $173,000.00 and that included $43,000.00 to cover the cost of filling the lines and tank bottoms.

A Yes sir.

Q That would leave a net of $130,000.00. Do you know if that is still the same amount?

A I believe it is, sir.

Q Could you tell me how much of that is required for cash operations, that is how much is carried for cash working capital and how much is carried in inventory?

A I have not it right down here, sir.

Q Mr. Humphries tells me $90,000.00 in inventory and $40,000.00 cash.

A I think that is very close.

Q And $43,000.00 for oil in lines and tank bottoms?

A Yes.

Q And do you feel that the pipe line system has practically arrived at its peak or maximum investment?

A I think it has just passed the peak.

Q What I would like to know is it is necessary now to carry a $90,000.00 inventory?

A In passing the peak, sir, I presume you refer to the barrels throughput.

Q Yes.

A Yes.

Q No, I am referring to physical pipe line. Are you going to put in more mileage of pipe lines?

A I rather think so. I anticipate that.

THE CHAIRMAN: The inventory, Mr. McDonald, of 90-odd thousand dollars was allowed to the Company because of war conditions which made it difficult for them to obtain parts for repairs. What I am wondering is whether we are justified in continuing an inventory of $90,000.00 under present conditions. Those were purely war time conditions calling for the laying in of supplies because it was difficult to replace articles at that time.

Q MR. McDONALD: Have you on hand supplies, inventory and supplies to the value of $90,000.00 now?

A I believe we have, sir.

Q Close to it.

A Pretty well. I may say that still reflects war conditions because we were warned by all manufacturers to buy a supply for three months in advance. Now we are being very careful at the present time in our purchases.

Q You were anticipating, for instance, the present steel strike?

A Well we have been advised by our Purchasing Department if we require pipe for the next three or four months to purchase now but we did not place an order, as we think we can use out of stock both old and new to get by this strike period.

Q What I had in mind, Mr. Coultis, was this, that these conditions for 1946, instead of being carried as strictly new, Capital Expenditures for 1946, that they be provided for out of surplus inventory, roughly $50,000.00 and you would not have to take into consideration this year an addition to the rate base.

MR. CHAMBERS: That is including automobiles?

MR. McDONALD: Well that would even include automobiles. And then we would be back to the inventory that was in effect in 1939, 1940 and 1941?

A Yes.

Q Which was a total of $80,000.00. You will always have your investment in the oil in the lines.

A Oh yes.

Q But I was thinking of saving that $50,000.00 of Capital Expenditure.

A We took the different items. Number 1 item, $2000.00, I do not think we can possibly touch that.

Q THE CHAIRMAN: One item that would come off, Mr. Coultis, would be your automobiles which are not part of your working capital. That is in your rate base. Your working capital would be represented by these other items, $2000.00, $36,225.00, $5000.00, $2000.00 and $10,000.00, if that is

a proper figure for contingencies. Plus your cash working capital. That is what Mr. McDonald is putting to you.

MR. McDONALD: Yes, in other words that at the end of 1946 we have our inventory back to $40,000.00 supplies on hand, rather than $90,000.00 supplies on hand.

A Well our supplies on hand naturally will decrease this year.

Q Yes.

A To some extent, because part of these supplies on hand is a reflection from the war's buying, engine parts and a multitude of different pieces of equipment that are carried for repairs that are not obtainable in this district and they are being worked down to the minimum quantity required.

Q Would it be fair to suggest this, for this year you maintain your inventory up to $90,000.00 for supplies and we use a reduced figure for 1947 and 1948.

A Yes, we have dropped from $65,000.00 to $48,000.00 in 1947 and to $28,800.00 in 1948.

Q Now these are the capital expenditures that you intend to make?

A Yes.

Q I am saying should we make almost similar deductions in your working capital. Would it be fair to say your working capital next year, insofar as it refers to supplies, should be $70,000.00?

A I think they will graduate down too, but not at too rapid a rate because we will still need working capital. We are still covering a large territory out there. We are covering it with older lines that might require

replacement. Our trunk lines are much older and our motive equipment, motive power equipment.

Q What have you got to say on the basis of the figures submitted by your company, the really appreciable production of this field will be taken by 1952.

A Yes.

Q Do you anticipate that the operations in the field for 1953 and 1954 that you would use the same mileage of line?

A No I do not, sir. In the next three years it might be necessary to lay new lines even though there were no new wells drilled. For instance, there are companies operating in Turner Valley and as their production drops I think these companies will find that it will be necessary to combine their operations. This company and this company might agree to produce their product at one unitized point, possibly an equal distance between both properties or between their wells. At the present time we have a two inch line leading into each of these properties. That has been in there since the beginning. And it is varied to five feet. Now it would be uneconomical to take that 5 foot line out to get some badly corroded pipes. Therefore it might be necessary to come in between with a new line, not necessarily a long line but a line long enough to reach that location and connect with our main gathering system. So I still expect to be laying some new lines for some considerable time yet, in addition to the occasional new well drilled.

Q That would be laying new line to wells which are not coming in as new producers and increasing the throughput?

A It would not be increasing the throughput. It would simply

be serving producers who are there now endeavouring to operate on an economical basis.

Q The thought I have in mind is this, Mr. Coultis, we are cutting down as it were the life of this field.

A Yes.

Q Now from 1946 to 1952 is only 6 years. Have we come to the point now where we can decide that there will be some salvage in this Valley Pipe Line equipment?

A That will come. I cannot tell you just at what date.

Q The thought I have in mind is this, that right now we are contemplating amortizing the equipment as a whole, depreciating it in its entirety and maybe we could now begin to take salvage into consideration.

A Yes, we have that in mind, sir.

Q And that if this field, if the Board should see fit to select a rate which will not entirely recover the company's investment by 1952, a small proportion or a reasonable proportion left over may equal the salvage. Mr. Chambers suggests that the rate base is now fixed at 5% salvage.

A That is right.

Q Would that be applicable both to the lines and pumping equipment?

A The equipment out there that will be difficult to salvage will be certain of the lines and particularly the tankage. The tankage will not be very salvageable other than your Hortonsphere because they are pretty old and they are showing a very high rate of corrosion.

Q Well the individual pumps at the wells for instance . . . .

A The pumps will probably be salvageable if you can get a buyer. Your motive power equipment other than four

motors, small motors, I do not think will be very salvageable. Most of these engines are running on sour natural gas and it is very hard on them. There will be quite a replacement in engines in the next three years.

Q Now have we not come to a consideration of a further pipe line rate in 1949? Your rate is fixed now for three years. Would you then be in a position to give consideration to an increasing salvage rate from 5% to some other rate?

A We would be in a better position to study it.

Q Now to sum up, Mr. Coultis, would you agree with me that in view of the situation regarding supplies for the company in 1946, it would be unwise to change the inventory of supplies on hand and constitute part of the working capital, that is the $90,000.00?

A I am not an accountant, sir, so I must go at this slowly. You are referring to the physical change or the books change?

Q No, the physical equipment right in the warehouse, which you value at around $90,000.00.

A At the present time?

Q Yes.

A Yes, sir.

Q You want to keep that on hand for 1946?

A I do, sir. I hope to decrease it during 1946, assuming that the manufacturing conditions improve over what they are now and what they have been. If things come back to what we call normal, where we can buy currently what we require, we hope to gradually bring that down. We are doing the very best we can at the present time, sir.

Q Would it be fair to say that you would bring it down

$20,000.00, to $70,000.00, in 1947?

A I would not like to estimate, sir, the amount that we will take it down. I assure you we will take it down all we possibly can.

Q Mr. Chambers tells me that your actual inventory on hand today is $150,000.00 value, so that the prospects that you will reduce that in three years to $70,000.00, have you any idea, is there any way you can make an estimate of that kind?

A I would be perfectly confident, sir, in saying that in three years we will reduce it to $100,000.00 or slightly below.

Q What I am looking for, Mr. Coultis, is to cut this working capital down to where it will be reflected in our rate.

A Yes.

Q So that we will have a more reasonable rate and can take into account the increase in depreciation and other approaches to an even rate.

A Our repair material will not decrease a great deal because our equipment, some of it, is very old.

Q Is there any way you can relate throughput to your operating expenses? As I pointed out to Mr. Constable, your throughput drops by 33-1/3% and your operating expense, according to your estimate, only drops 20%.

A No, you cannot tie them together, sir. It is impossible. In our peak years, when we were carrying our maximum volume of oil, our operating expense was less than it is today, because we were operating from a much less number of points, over a smaller area. We are today covering a

larger area and serving more wells and more locations than we were when we were serving the peak load of the field. We are still operating three trunk lines and we are cutting in every possible way we can, both staff and services in the field and still we serve a greater area and a greater number of points, making it very difficult to compare throughput with operating expense.

Q Now dealing with the Hortonspheres, Mr. Coultis, do you know what they cost originally?

A Around $65,000.00.

Q THE CHAIRMAN: Each?

A No, approximately $65,000.00 is what I have in my memory.

Q MR. McDONALD: For both?

A For both of them.

Q The total of expense in repairs is somewhere in the neighbor- of $25,000.00 or $26,000.00?

A Yes, I think, when we get our final figure in, we have not the final figure, it will be slightly more than that.

Q What was the estimated life of these Hortonspheres under these conditions, with this Absorption gasoline, would they last 10 or 15 years?

A I have no estimate on that, sir,

Q This defect in the welding, was that an error in the design and planning of the sphere?

A No, sir, I would not call it that, because your Provincial Inspection Department, which is very thorough, passed those tests and because they did not blow up, we assume they were all right. But by a new method of inspection of welded material, these defects were discovered and they were discovered in many parts of the United States and

Canada. Even the new rubber plant, the new tanks were practically torn down, cut out the welding and re-welded them.

Q Wasn't this the question, the question you were faced with was either to dismantle those tanks entirely and get rid of them or rebuild them?

A We were faced with the problem, assuming from appearances and past tests that these tanks were satisfactory and safe. But we were facing probably a major explosion that might have destroyed considerable property, not that of the Valley Pipe Line but it could have endangered these plants and it might have caused considerable loss of life as it did in Cleveland.

Q By having them fully repaired you have extended the life considerably.

A We believe as long as the sheet, the main parts of the tanks will last

Q The welds will last?

A Yes, the lifetime of the tanks.

Q Then I suggest that what you have really made is a capital expenditure which should be apportioned over the life of the tanks or over the life of the major operations for use they are going to be put to.

A I do not feel that way, sir. Your tanks served three years and I would not be prepared to swear these defects were all in that weld when they were built, or whether they were caused by contraction and expansion and the working of the tanks. A tank subject to 40 pounds pressure and dropped to zero pounds pressure and refilled, that metal worked. I am not an expert on metallurgy of

all types of steels.

Q But it is so that the tanks will be used for the balance of the life of the field?

A I hope so, yes, sir.

Q That is a reasonble forecast?

A Yes, I consider they are the best tanks we have.

Q If they had not been rebuilt, it would have been the better part of wisdom to discontinue the use of them?

A It would have been the only safe thing to do in the light of the experience other companies have had with similar tanks.

Q Can you tell me the proportion of absorption gasoline and crude oil handled in the system?

A It is about 1200 barrels per day against 16. . . . .

THE CHAIRMAN: Twelve hundred and seventy-seven.

A Yes.

Q Roughly 400.

Q MR. McDONALD: Is there any additional expense in handling absorption gasoline as compared with crude oil in the main pipe line?

A Your losses are greater.

Q Your losses are greater in the absorption gasoline?

A Yes.

Q And there is no gathering system for absorption gasoline. You pick it up right at the plant.

A No, there is a gathering system, sir, extending South to the British American plant and serving the British American and Gas & Oil Products plant.

Q That is a separate pipe line to the crude oil pipeline?

A That is a separate pipe line.

Q Is that a two inch line?

A It is three and four, it is part of each. It starts four inch, three inch and two inch.

Q That is all I have right now.

MR. ARNOLD: No questions.

Q BY THE CHAIRMAN: Mr. Coultis, are the Hortonspheres used for crude napthe or for crude oil at all?

A Are they now being used?

Q At any time?

A No, sir.

Q And the natural gasoline that is stored in the Hortonspheres is the property of Royalite or British American or Gas & Oil Products?

A That is right, sir.

Q The producers of the crude oil get no benefit whatever from those Hortonspheres?

A Each one of the companies you mentioned are all producers of crude oil. British American, I understand, have a part ownership . . . .

Q Under contract?

A Yes. It is the product from the producers' gas.

Q For which they are paid at the Absorption Plant and from then on they have no further interest in the natural gasoline, is that not so?

A I presume so, as far as dollars and cents go.

Q And that is all that matters, Mr. Coultis. All right. Now then will you tell me why Mr. A.B. or A.B. Company Limited, that has no interest whatever in the natural gasoline, why should he pay any part of the costs of some $27,000.00 to handle 7% of the total product of

the field.

A If the gasoline was an entirely separate entity and there was no crude oil produced, gathered or trans-shipped through trunk lines, then neither the gasoline producer nor the crude producer should enjoy or could enjoy the rate that they now get. I would assume that each helped the other.

Q Yes, but Mr. Coultis let us not confuse the issue. You have a tank farm which handles crude oil in which the British American, Royalite, all the independents and perhaps G. & O.P., I do not know, in which they all benefit; that tank farm in the field is needed for the proper handling of their crude oil. You need that storage facility, but when it comes to natural gasoline I still am wondering and have been since the last Hearing why a man who has absolutely no interest whatsoever in that natural gasoline should pay for any part of the cost of that storage in Turner Valley, more especially when the relationship is 7% but he is asked to bear his proportion of the $27,000.00 charged up all in one year. I find it difficult to understand, Mr. Coultis.

MR. CHAMBERS: Frankly sir, I have had the same thing in mind.

Q THE CHAIRMAN: You remember, Mr. Coultis, at the last Hearing, I suggested that there should be a classification of crude oil pipe line rates and natural gasoline pipe line rates. I realize it is too late to do it now. It cannot be done now. But the solution of this $27,000.00 lies . . . . .

MR. CHAMBERS: With deference, I say I think that is

a sound approach, but bear in mind, as I understand it, that the Valley Pipe Line Company, and correct me if I am wrong, Mr. Coultis, charges the same handling rate for absorption gasoline as it does for crude oil, is that right?

A That is right, sir.

Q Leaving out line losses.

A Yes.

THE CHAIRMAN: I am inclined to think the rate should be higher for absorption gasoline.

Q MR. CHAMBERS: Tell me if I am right in this, Mr. Coultis, On the other hand the Valley Pipe Line Company, in connection with crude, does the gathering.

A Yes, sir.

Q In that service rate?

A Yes.

Q Of crude.

A Yes.

Q But it does not do any gathering so far as absorption gasoline is concerned?

A Yes, it does, sir.

Q Well pardon me, it does not from the individual wells?

A No, sir.

Q You just told us it just gathered in bulk from the B.A. and the G.& O.P.

A That is right.

Q But there is a large percentage, as I understand it, in the North end, or North of a certain point - what point would that be, Mr. Coultis?

A I am not following you, sir, quite clearly.

Q As I understand it there is a certain amount of gasoline from the South end, from the B.A. and the G.O.P. area that you do bring up.

A Yes.

Q That gas comes from South of a certain place?

A Yes, South of the plants or Section 6, Township 20.

Q But that North of that area, your company does no gathering of absorption gasoline?

A That is right.

Q THE CHAIRMAN: Where is the Royalite Absorption Plant? It is right at Turner Valley is it not?

A Yes.

Q And the Hortonspheres are there too?

A Close to there, yes.

Q Is that your pipe line from the Absorption Plant to the Hortonspheres?

A It is our pipe line from Number 1 tanks to the Hortonspheres and it is also our pipeline from the Hortonspheres South to the other two plants.

Q MR. CHAMBERS: The pipe line from your Plant to the Hortonspheres is just across the road?

A Yes, a short distance.

MR. CHAMBERS: I feel that there should be some way of working it out. There are several compensating factors.

THE CHAIRMAN: That is one aspect of it. Now I am afraid I will have to adjourn. I have another appointment this afternoon. Have you any other evidence?

MR. CHAMBERS: I would like to check up on these things. I do not propose at the moment to call any more

witnesses, but I do want Mr. Constable to gather up the information that was requested and we can meet in the morning.

THE CHAIRMAN: Are you calling any evidence, Mr. McDonald?

MR. McDONALD: Not at this time, no.

THE CHAIRMAN: Mr. Arnold?

MR. ARNOLD: No, sir.

MR. R. J. CHRISTIAN: I am here on behalf of Anglo-Canadian Oil Refinery in Brandon. I am just sitting in listening. I presume later on it will be quite in order for me to bring up some subjects?

THE CHAIRMAN: Yes, indeed. I am sorry I did not give you an opportunity to cross-examine the witness. Then I think we will start at 9.30 tomorrow morning. I am going home by the 5 o'clock train.

MR. CHAMBERS: There is one thing and I am just bringing it up now because maybe counsel would like to give some thought to it and because I did not want to spring it on them. You, sir, mentioned it may or may not be necessary to call Dr. Katz. In any case, that would be along in February. I do suggest in the interests of all parties, not necessarily the company, because the situation gets worse, the rate has to be larger as time goes on, and I do intend tomorrow to make application to have an interim rate fixed. I would be very glad to discuss it with my learned friends if they have anything in mind. I think it is in the interests of all parties that that should be done.

THE CHAIRMAN: With respect to Dr. Katz, I will of course communicate with you and advise you as to the

situation before any decision is arrived at as to whether he shall be called or whether he shall not be called.

MR. CHAMBERS: Yes, sir.

THE CHAIRMAN: Then we will adjourn until half past nine.

(At this stage the Hearing was adjourned until 9.30 A.M. 30th January, 1946.)

.....

9.30 A.M. Session.

Wednesday,
January 30th, 1946.

MR. CHAMBERS: Sir, when we arose or just before we arose, Mr. Coultis had finished his evidence.

THE CHAIRMAN: I have some more questions I want to ask him.

SAMUEL G. COULTIS, Recalled.

MR. CHAMBERS: There is one matter I would like to mention. I think from the course of the examination you followed, that there are certain questions that Mr. McDonald asked of Mr. Coultis, with respect to benefit payments to employees, and Mr.McDonald yesterday made the suggestion that maybe the shareholders should pay a fair part of that. You came back and said you thought they should pay it all and then from the following conversation you proceeded to give your reasons. It occurred to me that maybe you had the producers in mind. I am not going to suggest that is so but I want to clear that up anyway.

A Yes, that is right.

THE CHAIRMAN: I had a memo of that down for this morning too, Mr Chambers.

Q I want to go back to the Hortonspheres, Mr. Coultis. If your throughput last year, that is natural gasoline throughput was 369,978 barrels and your rate was 9¼ so that your gross revenue from natural gasoline last year was $34,222.97. At 9¼. I will ask you to assume my arithmetic is correct.

A Yes sir.

MR. CHAMBERS: The absorption is 412 actually and you mentioned a figure of three hundred and some odd.

THE CHAIRMAN: 369,978.

MR. CHAMBERS: I think the actual was 412,540.

THE CHAIRMAN: I took my figures from your application. However the difference is so slight. The repairs to the Hortonspheres cost $27,237.86 leaving you with a margin of $7,000.00 and out of that $7,000.00 you would have your gathering costs to pay?

A Yes. And transportation.

Q And transportation, I was coming to that as another item. And the share of the cost of operating the Tank Farm, the Hortonspheres would pay a share of that and then the transportation from Turner Valley to Calgary and the depreciation on the Hortonspheres and a proportion of the depreciation on all the other assets used and a proportion of the administration costs and your line losses all come out of the $7,000.00?

A Yes.

Q So that I think we can deduce that you had a very substantial and heavy loss on the Absorption gasoline end of your business last year.

A Yes, if you applied that all to the one year. We assume now that these tanks will be good for many years to come and we should not reasonably expect a repetition of the repairs of anything of this nature.

Q But that is what you have done, Mr. Coultis. You have charged it all in one year have you not?

A Yes, we felt that was the only thing to do. It was a current expense incurred in that year.

Q We have not had the time or the opportunity to examine

your Hortonspheres or your absorption gasoline operation and how some of these costs are allocated, but doesn't it seem to you the crude oil producers are subsidizing the absorption gasoline end of this business?

A That could possibly appear that way from this one year's operations with this heavy repair bill in it.

Q But even taking that out, forgetting about that. You have your gathering costs, your tank farm, the proportion of the cost of your transportation to Calgary and depreciation of all these items that are involved in the natural gasoline end of the business and a proportion of the administration costs and your line losses all to come out of a revenue of $34,000.00. That is $3,000.00 a month. I ask you to go no further than this and say it is possible even without this heavy repair job that crude oil is subsidizing the natural gasoline.

A I would say to some extent, sir. If you are not transporting absorption gasoline, there would be the same number of operators in the main trunk line pump house and I think the same number of line walkers and I doubt very much whether it would be possible to reduce the number of gaugers by one man, because shipments of absorption gasoline are taken in batches from the two outlying plants and it does not mean a daily operation there.

Q Now I agree, Mr. Coultis, but in these days when a cost allocation is made in order that a true picture of any operation can be ascertained, all these costs would be allocated so much to crude oil and so much to natural gasoline, is that not so?

A Yes.

Q However it is perhaps academic. Now these Hortonspheres are a special type of tank, Mr. Coultis?

A They are a pressure tank, sir. They are built to withstand a working pressure of 40 pounds per square inch.

Q When they were tested by Government officiala they were able to carry 40 pounds pressure?

A Yes sir. They had a hydrostatic test applied to them, one and a half times their working pressure.

Q And these Hortonspheres are used in the States to carry liquified natural gas.

A They were at Cleveland, sir. That is the only location I would be prepared to say that operation has ever been carried on.

Q And one of them blew up?

A Yes, sir.

Q And caused a tremendous amount of damage and killed a lot of people.

A Well that is the assumption. I have read fire reports on that explosion but I have never read a report where it definitely marked the origin, the point of origin of that fire. I know during the fire that one or more of these tanks blew up. Whether they started the fire I am not prepared to say.

Q And the fire may have converted the liquid gas into a gas and increased the pressure. . . . . .

A Oh yes, the moment it escaped from the tank it would become a gaseous substance.

Q What pressure normally do you carry in these Hortonspheres here?

A That varies, sir, from 5 pounds to 40 pounds. 5 pounds to

about 38 pounds.

Q And after they were rebuilt or repaired or whatever was done to them, was another pressure test made?

A Yes sir.

Q What pressure did they carry then?

A They carried, they were tested for 40 pounds working pressure.

Q So that having spent $27,000.00 and I do not quarrel with the propriety of it, Mr. Coultis, I want you to understand that, because you discussed it with me before you did it, so there is no question as to the propriety of what you did, but after having spent that much money, your tanks just carry the same pressure that they carried before?

A That is right, sir.

Q And that being so, what you did was to take abundant precaution in having these repairs made or tanks rebuilt.

A Yes.

Q Extra precautions, which perhaps should have been done. . . .

A I would not say sir, "extra precautions". If I may say this, if a building inspector condemned an office building while the building was still standing there and being occupied, but the building inspector said that structure was unsafe owing to defective footings and it was liable to collapse at any time without any further warning, something would have to be done.

Q Was that the situation you had? Your tanks, remember, were tested. They were tested each year were they not?

A Yes.

Q And before they were repaired they had been tested within a period of 12 months, before they were repaired?

A They were tested hydrostatically when they were completed. Every year we were issued a new certificate but there were no further hydrostatic tests put on the tanks. Any further inspection was visual inspection.

Q External?

A Yes.

Q Now I want to go to your administration expenses.

A Pardon me, sir, any questions that may have arisen over these inspections, I may say I have samples here of the samples cut out of these tanks showing the defects

Q Now I am not quarrelling with the propriety of what you did, Mr. Coultis. I am only trying to find out how it should be charged.

A I also have a photograph of the inspection certificate here, sir.

Q That is not in question at all. I think what you did was perfectly proper and perfectly right. Now coming to your operating expenses, you estimated $44,500.00 and your actual was $55,017.00, or $10,517.00 more than your estimate. $4,000.00 of that is explained by the payment made to Mr. Young's Estate. What about the balance, Mr. Coultis? How did that arise?

MR. CHAMBERS: Mr. Constable has the details of that.

THE CHAIRMAN: All right.

A They are spread over many items. I do not have them in my mind.

Q I have a memo about the pensions and savings fund and your own remark was that these should be borne by the shareholders and my comment is that they are not being

paid by the shareholders. They are being paid by the producers of the oil. That is so is it not?

A Yes. That is where I think they should be paid.

Q Now your Unemployment Insurance, that is statutory, you must pay that.

A Yes.

Q Your Workmen's Compensation is statutory, you must pay that?

A That is right, sir.

Q But your sick benefit and Thrift Plan contributions and Employees' Welfare, Group Life Insurance and Hospitalization, that is simply what you might call an ex gratia payment by the company.

A Yes, those are benefits offered to the employees of this company as well as other subsidiary companies.

Q I am altogether in agreement with the principle that a company should do these things but I have some doubts as to whether a Public Utility company should charge an item of that kind against its operations, expenses, or whether it ought to charge it to its rate of return. What would your comment on that be, Mr. Coultis?

A I think it should be charged along with the salary paid to that particular employee or those employees who are receiving the benefits.

Q Well I have not any objection to the company being generous but I would like to see them being generous with their own money and not someone else's money. There is another item I did not understand. In your submission it is stated that the Absorption gasoline loss for the year, with December being estimated, was $1,649.00 and the actual figure appears to be $3,298.00. Did you have a tremendous line

loss in natural gasoline in December?

A Yes, we had a main line break. I am quite sure it was in December.

Q That explains the heavy line loss?

A It would in December, yes. I believe that break occurred some time around three o'clock in the morning in the hill section approximately three miles North of the plant.

Q Now coming, Mr. Coultis, to page 18 of your application. You have your estimates of your capital expenditures for 1946, 1947 and 1948 and in 1946 you have $10,000.00 for contingencies, which represents roughly 20% for contingencies. In 1947 you have $6,500.00 for contingencies, 15%, and in 1948 you have $5,000.00 for contingencies, which is 25%. Now I am just wondering why there is that difference in your percentage for contingencies in those three years or are they just a figure?

A They are absolutely just a figure, sir. They are my best guess at this time for an additional sum of money which we cannot estimate what it may be used for, for contingencies unforeseen at this time that may arise in the years mentioned.

Q Is not the usual engineering figure 10% for contingencies? And you have 15% and 25% and 20%?

A That is right, sir.

Q Is not the usual figure 10%, the usual engineering figure?

A On construction work, yes, sir. This is construction and operation and . . . . .

Q No, this is capital expenditures.

A That is right.

Q Just capital expenditures, which is construction mostly is it not?

A

A A good deal of it, sir, is automotive equipment. That would hardly be construction. Miscellaneous items including office requirements and laboratory requirements. Terminals and pipe lines could be classed as construction.

Q I took out your automotive equipment for that very reason and then the percentages become 27% for 1946, 25% in 1947 and 30% in 1948, when you take out automobiles from those capital expenditures. However I think you have answered it, Mr. Coultis. That was just a figure you really pulled out of the air.

A Absolutely. $5000.00 for a year's operations as a contingency is not very much money.

Q Are there any expenses charged by the Valley Pipe Line Company to other of the integrated companies of Imperial Oil?

A I do not recall any at the moment. I do not know of any.

Q And are there any operation expenses charged by the integrated companies to the Valley Pipe Line Company?

A Would you class, sir, this hiring of a specific piece of equipment such as a tractor or a ditching machine to do . . .

Q Yes, things of that kind.

A In that case, we find it necessary to move our ditching machine to a distant point in making a repair, for instance, on the main line, as we have been required to do during this year and we find it cheaper to hire a large truck and load the machine and transport it in that manner rather than run it on its own caterpillar treads. Vice versa in a hurry-up job for the Madison Company, I believe they asked us to do a small amount of ditching for them in the Fall when our machine was idle and they paid us by the

hour for the use of that machine. We pay them their set charge for the use of one of their machines. Now that type of thing is the only thing I can recall, sir, in answering your question.

Q I am not going to discuss income tax with you, Mr. Coultis. I am going to leave that to Mr. Humphries and to Mr. Baines. Have you anything further, Mr. Chambers?

MR. CHAMBERS: Just in connection with that last question. Your company is also charged by the Madison, as I understand it, for water, steam and electricity.

A Oh yes. I did not understand the Chairman . . . . .

THE CHAIRMAN: No, I did not have that in mind, Mr. Coultis.

A I did not think so.

. . . . . .

RE-EXAMINATION OF THE SAME WITNESS BY MR. CHAMBERS.

Q Would you turn to page 18 of the application, Exhibit 2?

A Page 18, yes.

Q That $1000.00 contingency item has been changed to $10,000.00. That was an error. It was $1000.00 in the first place.

A Yes.

Q This occurs to me, Mr. Coultis, and I would like to get your re-action, that one of the more unknown items in what you will have to spend in capital additions in any year is the probable gathering charges, gathering lines.

A Yes.

Q And the amount of gathering lines that you have to build in any year is caused or governed by circumstances over which you or your company have no control.

A That is right, sir.

Q In other words, what I am getting at is that the amount that your company spends for new gathering lines in a year depends on the amount of drilling and the number of wells that are brought into production.

A That is right, sir.

Q And where they are located.

A Where their production centres are located, or production equipment and the type of pumping equipment necessary to be located at that particular point.

Q So, as I understand it, your estimate of capital additions shown on page 18, so far as you are concerned, you have told us they are a guess.

A They are our best estimates from all available information at the time of making up our Budget for our future years' operations.

Q This question of Employees' Benefits, I think you told us yesterday that they had been worked out in more or less detail or on general principles with your Employees' Council.

A With our employees. . . .

Q Council,is it or Industrial Council.

A Not altogether, sir, in part but not entirely so.

Q What would you say as to this, first of all as I understand it you told us yesterday the company has no specific pension scheme through the Government.

A No sir.

Q And in the absence of that and assuming there were none of these benefits, what if any effect would it have on the wage scale of your company? Do you think it would have any effect at all up or down?

A Yes, I think it would have an effect. The benefits derived by all employees enjoying the different benefits of the company certainly is part of their remuneration.

Q I would like to pursue this with you for the purposes of the record. You would further have a very difficult labor situation if you did not pay them with other companies paying benefits of a similar nature.

THE CHAIRMAN: I am not quarrelling with the principle. I think it is excellent. I have no quarrel with that at all. What is bothering me is who should do the paying, should it come out of your 8% return on your investment or should it come out of the producer? That is the only problem.

MR. CHAMBERS: I agree.

THE CHAIRMAN: I have no quarrel with the principle at all.

Q MR. CHAMBERS: On this question of absorption gasoline, I want to get more or less on the record the nature of the operations that your company performs, because the Board may see fit to endeavour to allocate or distribute costs to the actual operations performed. Now can you tell us offhand approximately how many miles of gathering system you have in Turner Valley?

A About 206 miles.

Q Now how many miles of that, approximately, again, of those lines, are used exclusively for gathering or transporting that absorption gasoline to your system? I am referring to Turner Valley now and the property that is owned by you.

A You are referring strictly to gathering lines in Turner Valley?

Q That is right.

A For the transportation of absorption gasoline?

Q That is right.

A Between 10 and 11 miles. I cannot give you the exact footage at the moment. Between 10 and 11 miles of line.

Q And are those the lines that you mentioned to Mr. McDonald yesterday that bring the absorption gasoline from the B.A. and G.& O.P. plants?

A Yes sir.

Q As I understand it, you said 200 miles altogether, was it?

A Altogether, yes.

Q As I understand it then, the other 190 miles of line . . . .

A Excuse me, sir, I want to check that figure. May I correct that, sir?

Q Yes, surely.

A I gave the total mileage of the Valley Pipe Line system which is approximately 104 miles of gathering lines.

Q 104?

A Yes. The entire Valley Pipe Line system is 204.91 miles.

Q Now we will follow that through in a minute. You have 104 miles of gathering lines in Turner Valley?

A Yes.

Q And between 10 and 11 miles of those lines are used exclusively for transporting or collecting absorption gasoline?

A Yes, sir.

Q And the other 94 or 93 miles are used exclusively for gathering crude oil?

A That is right.

Q Now then you have now many miles of trunk line?

A 96.

Q And how many miles of that 96 miles of trunk line are used exclusively for transporting absorption gasoline?

A 29.28 miles. At the present time that line at times is used to batch crude oil.

Q When you say "batch crude oil" you mean at times you discontinue using it for absorption gasoline and you put crude oil through it?

A That is right.

Q As I understand it, in addition to the actual gathering lines you have pumping equipment and so on on these gathering lines, whether they are crude or absorption gasoline, is that right?

A Yes, sir.

Q And would the amount of pumping equipment and ancillary apparatus be more or less in proportion to the mileage, do you think? I am not trying to hold you down too closely, Mr. Coultis?

A No, I would not say that the pumps are in proportion to the mileage of lines. Pumps are governed by the points from which you take delivery.

Q Let me put it this way, and indicate to you what I am getting at. Suppose you have 10 miles of line, that is gathering and transporting in the Valley absorption gasoline.

A Yes.

Q You have another 10 miles over here that is gathering and transporting crude oil?

A Yes.

Q Is there not in the ordinary course more pumping equipment and whatever else goes with it required for the

absorption pipe line than there is for the crude pipe line?

A There would be more pumping equipment required on the crude system.

Q That is by reason of the inherent nature of the product, is that right?

A Because of the reason that absorption gasoline is picked up or received at plant Tank Farms.

Q Whereas the crude, the 10 miles of crude line, whatever it was, runs all around to the wells?

A To the different wells,

Q To the separators?

A That is right, sir.

Q Now let us look for a moment at the operating costs. As I understand it, a considerable portion of your operating costs - and I am thinking primarily of wages and trucks and so on in the Valley - consists of your men going around gauging tanks at the different wells or Tank Farms, is that right?

A Yes, sir. Testing tanks.

Q Can you give us any idea as to the proportion, just roughly, of the time that is spent in that kind of thing in the absorption part of the system as compared with the crude part of the system? Do you see what I mean?

THE CHAIRMAN: We can perhaps make an allocation on the volumetric basis.

MR. CHAMBERS: Yes, I think so.

THE CHAIRMAN: Or the Sales Realization.

Q MR. CHAMBERS: But the point I am trying to get at is, if the Board wants to follow it through, that while we have Hortonspheres due solely to absorption gasoline,

we have a lot of other things that are due solely to crude. Frankly, I have not any idea what the answer is. But it having been raised, I think I should get all the information I can for the record from Mr. Coultis.

THE CHAIRMAN: I do not want to stop you, Mr. Chambers, Although I asked Mr. Coultis those questions, we have not any information that would enable any allocation to be made and I am not going to try. The only one question in my mind is how were we going to treat that $27,000.00. That is the only question in my mind.

MR. CHAMBERS: Now just by way of observation, I can say that I could concede there are two approaches to this problem but it does strike me, and I think it does boil down to this, that if it is charged to expense this year the over-all amount that is paid by the producer or the refinery or whoever pays it, will be less. Perhaps it will be paid by these people who happen to be shipping this year but if it is paid over a period of years it will amount to considerably more, on account of the return and so on.

THE CHAIRMAN: That is right. And the people, say, who 5 years from now are producing natural gas and are not producing it today will then be getting the benefit of the Hortonspheres.

MR. CHAMBERS: That is right.

THE CHAIRMAN: And perhaps it would only be fair that they should pay.

MR. CHAMBERS: As I say, it is a matter of policy.

THE CHAIRMAN: Please do not misunderstand me. I do not want to stop you, but I want you to know why I

raised this question was more academic than practical.

MR. CHAMBERS: Then that is all I want to say.

.....

EXAMINATION OF THE SAME WITNESS BY THE CHAIRMAN.

Q Having started those questions, Mr. Chambers, I remembered something else I wanted to ask Mr. Coultis.

Mr. Coultis, we did some arithmetic on the figures as given in your application, not the final figures, and we discovered that the Anglo-Canadian paid about 8.1%, contributed 8.1% to your revenue, British American contributed 27.5%, the Consumers' Co-Operative, 1.7%, Gas & Oil Refineries, .2%; Hi-Way Refineries, 1.3%, Northern Petroleum Corporation, .3% and Imperial Oil, 60.9%. Now you say that British American and Imperial Oil are your biggest customers and then next comes Anglo-Canadian, each of these companies having a refinery. Would it be correct to say, Mr. Coultis, that any increase in the pipe line rate will bear much harder on the producers than it will on the refining companies, who produce the oil and who themselves have to transport the oil through the pipe line, from the very fact that they have a refinery and get all the benefits of the end products?

A I presume that, looking at it from that light, these companies being fortunate enough to have succeeded in drilling and obtaining production and also if the same companies were in the refining business, it might possibly be in a better position.

Q I think that is fair, Mr. Coultis. Anything further, Mr. McDonald?

.....

CROSS-EXAMINATION OF THE SAME WITNESS BY MR. McDONALD.

Q Just one thing, as I understand it Mr. Coultis, the absorption line from the absorption plant to the Hortonspheres and the Hortonspheres themselves and then the trunk line approximately 29.328 miles you do use almost entirely, exept for the trunk line, for absorption gasoline purposes.

A The gathering line?

Q The gathering line from the absorption plant to the Hortonspheres?

A Yes, that is right.

Q And the 29.28 mile trunk line?

A At the moment. That was a crude oil line and it had been used to batch both products or three products, crude oil, crude naphtha and absorption gasoline and it can be so used again if necessrry.

Q What I had in mind was this, that according to the forecast made by Mr. Connell we have a limit on our crude oil production and it was noticeable, however, that the amount of absorption gasoline had increased in 1952 from his estimate of 6700 barrels in 1946 to 8250 . . . . No, I am sorry.

A What page?

Q The absorption gasoline is going down. I was thinking of crude naphtha. Page 14. There is still a substantial amount of absorption gasoline being handled in 1952?

A Yes, sir.

Q Now have you any idea as to how long, or any estimate that you can put before us as to how long that will continue?

A Being produced in appreciable quantities?

Q Yes. In the neighbourhood of 100,000 barrels or 180,000

barrels?

A I am not prepared to make any specific answer to that, sir, because it depends on the market for gas, the availability of gas and how long Turner Valley will produce gas.

MR. CHAMBERS: And we are going to go into that at another time and place.

Q MR. McDONALD: What I have in mind is whether we should try and depreciate this particular system at a different rate than the whole system, or whether the crude production and the absorption gasoline production is so much tied together that they should be still left on the same rate.

A I do not believe that I would care to undertake to separate them.

THE CHAIRMAN: I think they should have been divided in 1939, Mr. McDonald, but it was not done and I do not think we can do it now.

MR. McDONALD: I am afraid not.

MR. CHAMBERS: I think this might be said, as I understand absorption gasoline and the crude come out of, except for the gas cap, would come out in probably a prorated form all along the lines.

THE CHAIRMAN: Yes.

MR. McDONALD: I think that explains the difference in the estimates, the estimate remaining after 1952 is very likely for gas cap absorption gasoline.

Q In this estimate on page 18, did you include the extension of gathering lines to the far North Home wells that are now being placed on test?

A We did that in 1945's budget and I believe we allowed a

certain amount of money that is included in that thirty-six to reach their nearest well if that was necessary.

Q The expenditure actually was not made in 1945?

A No, the well was not completed in 1945.

Q That is all, thanks.

MR. ARNOLD: Nothing, thanks.

MR. CHRISTIAN: Could I ask a question? Do I understand that the 108 million barrels was based on a certain area in Turner Valley?

THE CHAIRMAN: The known area at that time went up to the British American well, I think it was, Mr. Coultis, was it not, in Section 17, in what, 21-3?

MR. McDONALD: 21-3 well.

MR. CHRISTIAN: If that is the case, these expenditures that are stated on Page 7 of his Brief, calling for approximately $133,000.00 and advanced to $142,000.00, do I understand that expenditure calls for any lines outside that area that may be needed?

THE CHAIRMAN: Well Home is drilling two wells now. I think one will be approximately three miles from the British Dominion tank farm.

A That is the farthest well you are referring to?

Q Yes.

A It would be all of that.

Q Three miles to the nearest one and a mile further on or two miles further on.

A It is about five miles to the 21 well from the end of the present gathering system.

Q So that you are faced with a possible expenditure for other pipelines to those two wells, covering five miles?

A Yes.

THE CHAIRMAN: Is that what you want, Mr. Christian?

MR. CHRISTIAN: Yes sir. It says "adjacent territory". What I am after, sir, is that if these expenditures are approved and oil is discovered in the adjacent territories, it would have the effect of increasing or elevating their estimates of 75 million barrels at the present time, would it not?

THE CHAIRMAN: Quite so. No doubt of that.

MR. CHRISTIAN: So that these expenditures that are proposed now, if allowed, then the estimate of the 75 million should be raised.

THE CHAIRMAN: It necessarily would go up. The information we have, Mr. Christian, and I do not know how accurate it is, but I think it is reasonably accurate, is that if these two Home wells come in, there are possibly 15 other drilling sites in that area. Is that not right?

THE WITNESS: I cannot vouch for that.

Q But approximately, is that not what we are told?

A There would be approximately that many if they were good wells.

Q MR. CHRISTIAN: So that in the event that those expenditures, proposed expenditures, on page 7 were more or less disallowed and if, say, they require $1,708,436.00 of revenue to cover the present set-up of 75 million barrels, well now if you deduct that 142,000 off that, you will find that brings that back to very close to the revenue of 108,0million with in fifty or sixty thousand dollars. So that, as I say, I am vitally interested in this thing from the refinery angle and I very strongly

object to a lot of proposed expenditures that are more or less up in the air.

THE CHAIRMAN: What page are you referring to, Mr. Christian?

MR. CHRISTIAN: On the new sheets, page 2. They say that the estimated future revenue required on the basis of 75,789,715 barrels, at the foot of the page it is $1,708,000.00 approximately.

THE CHAIRMAN: Yes.

MR. CHRISTIAN: If you deduct from 1,708,000 the $142,000.00 of the proposed expenditures.

MR. McDONALD: That is the total on page 18.

MR. CHRISTIAN: You will find that it brings it back to within a fair range of the 108 million.

THE CHAIRMAN: I see your point.

MR. CHRISTIAN: So that these proposed expenditures, sir, seem to me to be something that is in the air and that I believe, sir, should be taken into consideration in fixing this rate. That is only my opinion, sir, on the matter. Now there is one more item that I would say, sir, that this rate of 9½ cents was set on the basis of 6 million barrels throughput per day. In 1939 to 1945, according to their own estimates, they had a throughput of over 8 million barrels average for those years. In 1945 they were some 800,000 barrels over. Would it not be fair that until such time as the Board is in a position to give this study, to leave the present rate as it stands for 1946, in view of their claim that they are going to have approximately 6 million barrels through the pipe line. That is all, sir.

THE CHAIRMAN: Anything further?

MR. CHAMBERS: I can deal with what Mr. Christian has just now.

THE CHAIRMAN: We will do that later.

MR. CHAMBERS: Mr. Constable has some further information.

.....

H. L. CONSTABLE, Recalled, examined by Mr. Chambers.

Q Mr. Constable, you are still under oath?

A Yes.

Q You were to get for us yesterday a more detailed breakdown of the administration expenses?

A That is correct, sir.

Q Will you give us the information on that?

A We were dealing with the estimate of $44,500.00 for the year. Now in this substitution here . . . . .

Q By the way, is that marked as an Exhibit? I wonder if we should not have it marked as an exhibit.

THE CHAIRMAN: I think we will make it part of Exhibit 2.

MR. CHAMBERS: Very good, sir.

A Our detailed charges for the year were $55,000.00, as we have been discussing on page 1 of the revision of the application. You will notice the charge is $50,243.47.

Q THE CHAIRMAN: What page is that?

A On the 1st page sir. Now I mentioned yesterday there was a charge of $4000.00 death benefit which I know was not included in the estimate and if we add that $4000.00 to the $44,500.00 we come within $1700.00 of the estimate.

Q Yes. Where did I get the $55,000.00?

A You got it from our original brief. That was an estimate also.

MR. CHAMBERS: Was there any other information you wanted?

Q MR. McDONALD: Yes. What makes up your administration expense? What are the main items?

A Well we have salaries.

Q Yes, what are they?

A The total amount?

Q Yes.

A About $32,000.00. Travelling expenses, I am not giving you the last dollars and cents here.

Q No.

A I will if you wish. $2,311.00. Legal fees, $1733.00 and other professional fees, $1524.00. Insurance, $80.00. Repairs to furniture and appliances, $160.00. Janitors' supplies, $71.00. Repairs to building, $218.00; electricity, heat and water, $327.00; telephone, telegraph and cable, $707.00; postage and excise stamps, $236.00. Stationery and office supplies, $636.00. Furnishings other than capital, $33.00. Subscriptions and dues, $84.00. Contributions and donations, $80.00. Death benefits, $4025.00. Employees' welfare, $764.00. Canadian Army payroll, $4700.00. Miscellaneous expense, $220.00. Utility Board expense, $315.00. I believe that is all.

Q THE CHAIRMAN: Did you pay us that $300.00?

A I guess we incurred that expense dealing with you, sir.

Q I know I did not get it.

Q MR. McDONALD: I take it that salaries include executive salaries and the office staff in Calgary, is

that what that includes?

A Yes, sir.

Q The executive officers comprise Mr. Coultis, yourself and who else?

A And Mr. Trotter in the field.

Q Then you have a staff in Calgary?

A Yes.

Q How many clerks have you in Calgary?

A Seven.

Q And stenographers?

A That is all included.

Q That is included?

A That includes the whole staff.

Q And travelling expense, is that the travelling expense of Mr. Coultis and yourself and Mr. Trotter?

A That is correct.

Q That is mostly automobile expense?

A Yes, sir.

Q And legal fees, we know where that is. Professional fees?

A That is auditors.

Q Did you pay the Royalite Company for Mr. Taylor's professional advice, for instance?

A Mr. Taylor, before he left, yes there was a charge, but I do not remember. When did he leave?

Q Well I am just suggesting to you . . . . .

A I do not know whether that was in that year or not.

Q That would include the payment to Royalite for Mr. Connell's services and Mr. Taylor's services in connection with that?

MR. CONNELL: He would be here in 1945.

A Oh, Verne Taylor.

Q Yes.

A Oh I am sorry. I was thinking of the lawyer.

Q MR. McDONALD: I was thinking of the advice from the Petroleum Engineer.

A No, this would not include charges, I believe, from the Petroleum Engineer. That would, I believe, be in this Utility Board charge. I am not sure of that.

MR. CHAMBERS: I am not trying to prompt the witness but Mr. Coultis tells me that there was no charge for Mr. Taylor for anything he did unless there was some expense for him coming to Calgary or something of that nature.

Q MR. McDONALD: So that the professional fees are auditors' fees?

A Yes, sir, and I believe . . . . . Who was your successor or who did you suceedd, Mr. Bessemer?

Q MR. CHAMBERS: Mr. Johnson?

A There may be some of his charges.

Q MR. McDONALD: Now then, we come to Employees' Welfare.

A Yes.

Q Was that similar to this Thrift Plan contribution, Employees' Welfare and Group Insurance?

A No, it was not. And you have got me on that one. I am not sure on that. I did not get it analyzed. We did not have time to do everything last night.

Q Is it a recurring charge? Is that a charge that will occur next year?

A Yes but to a much lesser amount we have estimated.

Q What do you estimate it for next year?

A $290.00.

Q Then Canadian Army Payroll, $4700.00.

A Yes, sir.

Q That is a payment whereby your company paid the difference between a man's army pay and the pay that employee would receive had he remained with you?

A That is correct.

Q And that is an item that will disappear in the future?

A Yes, sir.

Q Have you anyone left that has not returned?

A Yes, we have two or three left.

Q Two or three men still in the service?

A Yes, sir.

Q That is all.

THE CHAIRMAN: Thank you, Mr. Constable. Any other evidence?

MR. CHAMBERS: I have no further evidence, Mr. Chairman.

THE CHAIRMAN: Do you want to call Mr. Baines at all, Mr. McDonald.

MR. McDONALD: Yes, there is this matter of income tax.

THE CHAIRMAN: I think we should leave that to Mr. Baines and Mr. Humphries. If there is any contention about it we can speak to it next week when I am down on another matter.

MR. McDONALD: Yes.

THE CHAIRMAN: I am quite sure that these two gentlemen will find the answer, whatever it may be.

MR. CHAMBERS: At least find the facts.

THE CHAIRMAN: Yes, that is right. It will be open to that extent for further evidence if need be. Now

what about Argument?

MR. CHAMBERS: Does my learned friend want to argue this morning?

MR. McDONALD: No. What I wanted to do was to report back to my committee and discuss with them these matters that are questions of policy rather than items.

THE CHAIRMAN: If you prefer to leave any arguments over, I will do so, but I would like some expression of opinion from you with respect to these items we have discussed which might be debateable.

MR. McDONALD: Yes, that is what I intend to deal with. And also the question of the depreciation, arising out of whether Dr. Katz' views will coincide with Mr. Connell's. I am very much inclined to use Dr. Katz as the umpire or referee and that I would suggest would be acceptable to my clients. I feel Mr. Connell's estimate now is on the conservative side and we should not depart as much as 30% from the original figure of 108 million, which would change to a light degree the calculation on the annual rate for the three year basis.

THE CHAIRMAN: Then of course the explosion that we are going to have in a day or two might change the whole picture. There might be 2 million barrels to be recovered ultimately.

MR. CHAMBERS: I do not propose to argue at any length but I am asking for an interim rate.

THE CHAIRMAN: When do your clients bill?

MR. CHAMBERS: They bill in respect of each month and I am being frank about this, I have some doubt whether an Order, an Order made now in respect to the January through-

put for instance, whether in the absence of consent of the parties, it could be retro-active.

THE CHAIRMAN: I do not intend to do that.

MR. CHAMBERS: That is going through my own mind.

THE CHAIRMAN: You have billed for January?

MR. CHAMBERS: No, we have not yet.

THE CHAIRMAN: When do these bills go out?

MR. CONSTABLE: The first week in February.

THE CHAIRMAN: What date?

MR. CONSTABLE: We usually have our bills out before the 5th.

MR. CHAMBERS: That is the bill for the service we have rendered in January and what I have in mind is this, that any Order to be effective for the services rendered, it should be communicated or made an communicated, I suggest, to the customers on or before the 31st of January. I may be trying to be abundantly cautious.

THE CHAIRMAN: I think so.

MR. CHAMBERS: After all, the service is being performed and if an Order is made afterwards, that Order is affecting something that has already been done.

THE CHAIRMAN: But if it is made on the first.

MR. CHAMBERS: I do not think anybody will quarrel with it.

THE CHAIRMAN: The fact is I want Mr. Baines to do quite a bit of arithmetic before I make any Order at all. I do not think, if I make an Order on the 3rd or the 4th, that anyone is going to attack it, but I would not want to make it retro-active to the 1st of January. That would be going too far.

MR. CHAMBERS: I would like to deal first of all with remarks made by Mr. Christian, when he referred as I understand it, to Capital Additions, Estimated Future Capital Additions, which are shown on page 18 of Exhibit 2 which is Schedule 3. And those come to some $130 or $140 thousand dollars I think. Now I would like to make it clear that the sum total of those three figures on page 18 are not included in $1,761,235.33 on page 2 of the submission, Exhibit 2, nor do they appear in the $1,558,557.55 also appearing on page 2 of the submission, Exhibit 2. These two figures of $1,558,000 odd and 1,761,000 odd only include and are only made up of operating expenses for the next three years, including of course depreciation based on throughput and the amount of the depreciation in those three years would vary somewhat, not a great deal, by the amount of the totals on Schedule 3 of page 18 of Exhibit 2 itself.

THE CHAIRMAN: If those expenditures are in fact made they will come within the depreciation reserves.

MR. CHAMBERS: Yes, and on the other hand these figures on page 18 of Exhibit 2 are only estimates. The company is not to get, and I am not saying this in any way by way of criticism of Mr. Christian, because he has had a limited time and he is not as familiar with the background of these things as the rest of us are, - but these are only estimates now made for the purposes of fixing a rate. Obviously there has to be some estimate for the future. Nobody can tell exactly, but the Company does not get a return on those expenditures unless the money is actually spent. If less is spent, for instance, instead of the $65,000.00

estimated for 1946, there is $20,000.00 spent, under the Board's ruling the Company only gets a return in 1946 of 8% on half of those Capital Additions actually spent. For instance, last year they figured on, I think it was $78,000.00 and there was $16,000.00 spent. It is on that that we are getting a rate of return in the amendment. The fact that those expenditures may or may not be made will not decrease the required revenue for the next three years, or the next year even, by the amount of the estimate made for the future capital additions for three years. Now we often hear and read that a utility operation puts certain restrictions on a utility company in the way of earnings and so on but that over and as against that there are certain benefits by way of guarantee and so on. In other words in my appreciation, the general principle of Public Utility Regulations is you take some of the speculation out of it and in return for that they take a less net return.

THE CHAIRMAN: They benefit when times are bad and they suffer when times are good.

MR. CHAMBERS: Another thing, and I am raising this not by way of argument but in order to get the background of this thing as I understand it, Public Utility Regulation as administered for a number of years is undergoing a change now, not up here but down in the States and probably the influence may come up here. What I have to say in that regard is illustrated by what took place in the regulation of the Gas Company here as shown by the Orders made in the past. My original understanding is this that the Utility Board, for the purposes of the regulation, had a

Hearing. They found out the actual situation. They more or less endeavoured by evidence to make an expert guess at what the probabilities of business, the amount of business would be and the amount of operating expense. On that estimate a rate was fixed, or rates for the service or services that were to be performed and it was then left to the Utility Company to go out, build up its business if it could by efficiency and so on and to do better if it could. The fact remained that so long as circumstances did not vary too much from the predictions made when the rates were fixed, that the public were fairly treated and that anything better that the utility could do, until the amount it was making became unconscionable, it retained that. Another corollary of that is this, as I understand it, that the regulatory Board did not pretend or even assume - as a matter of fact I think they used to go out of their way in many cases, as you have, sir, in some cases, to indicate the Board does not take responsibility for managing the business but rather when the matter came before the Board for review for the fixing of rates, the test by and large was. Are the practices followed by the Utility and are the expenses that it is paying reasonable. Are they along the lines of general sound business practice and that so long as they came within that category and so long as the Board felt that the management and the company were acting in good faith, a particular type of expenditure was not criticized. In other words that the principle was that it did not go through everything with a sharp lead pencil to see whetherthey could shave a dollar off here or a hundred dollars off there, but whether the business was being

carried on reasonably in the interests of the public on general policy, in the interests of the public and so on. I must confess, sir, that I think there might have been some change in that policy in the United States in recent years. I am really bringing it up for this reason, with all deference to what has taken place over there, I do submit that conditions are not altogether the same and the fact that they do without more is not necessarily ground for it being a precedent in this country. I say it is in the public interest in the long run that the rules or general policies of regulation in this country be definite. It is better that the law be definite and that is in the last analysis in the best interests of the public. And that every change in policy or of regulation in the United States, I submit that automatically should not follow here. Obviously I am making these observations in connection with the same items that have been raised, the same questions that have been raised here about wages. After all, the United States are having their wage problems to a far greater extent proportionately than we are at the present time. There are matters of that kind and I am not going into them in detail. But to get back to this particular case, I do submit that a pipe line such as this is in a somewhat different category than say a gas or an electric utility serving the public. They can to a considerable degree control and build up and extend its market. Here we have a utility that is dependent in its life and for its business is dependent solely on the moves that other parties make, drilling in Turner Valley, and that is dependent solely on what to a large extent is in the

ground and the rest is the gambling instinct and how much people are prepared to take chances. What I say is this that a utility such as this is not altogether in the same position as a gas company because the Gas Company can make a market and the Utility Board can preserve that market to it. That is one of the advantages of regulation. But then the restriction, they say "we are going to see you have rates within a certain range that you will earn so much money." The situation is somewhat different here. The Board can pass Orders and set rates and so on but you cannot get the revenue unless drilling is done in Turner Valley or unless the oil is there. The life of this utility is dependent not on what the operator or management of the Company can do and the assured success or the assured return and the depreciation are not assured to the same extent and they cannot be assured to the same extent by a regulatory Board as the extent to which it can be done or assured by companies that are in a retail business. What I have said about production depends to a certain extent upon the market on hand and the market on hand is controlled by things altogether apart from the Utility Company. It cannot build up its market. So for that reason I am suggesting that the Board and all of us in approaching this problem, there is more necessity for us leaning to the conservative side than for instance if we were in the retailing business, selling something to the public. Therefore, I say that that reason that exists, still exists and every month that goes by means that there is that much less business there for this company's properties to be depreciated and that the time might very

well come before it is fully depreciated, not only where it cannot get its depreciation, but cannot even earn the full return on the undepreciated amount. It depends on how much will be down there to be amortized. It is true and nobody is denying that there will be some oil there but it may be in quantities that just does not make it economic to be handled. I say that for the purpose of approaching my application that in the general interest of producers and refiners and the company that every month that goes by that means there will be a higher rate later on. Then there is this situation as I understand it that any Order fixed, whether it is temporary or final, has to be approved by the Wartime Prices and Trade Board. I think that is still in existence.

THE CHAIRMAN: That is right. I discussed it with Mr. Campbell in Edmonton the other day.

MR. CHAMBERS: So that on the basis of the figures set forth on page 3 of this submission, Exhibit 2, I am asking that a 12½ cent rate because there is not much leeway between 12.2892 and 12.5, that a rate of 12½ cents should be fixed on a temporary basis. If anything turns up either through the evidence that Dr. Katz may give or his opinions, or if the situation does not work out as it is now predicated, well as I say I violently disagree with the principle of taking back that having regard to this situation, that the life of this field is limited and that we should save every dollar we can within reason and if the company - I am taking the responsibility of saying this on its behalf - if they make more than the 8% or if they make more than they are entitled to, we are

prepared to account for it and it can be passed on in the new rate. This company is not looking for more than its net return and its depreciation when the picture is all through. I am prepared to agree readily that the whole picture be looked at, I mean from the last Hearing on of course. I do not think there is much more I can say at the moment.

MR. CHRISTIAN: Sir, I have listened to Mr. Chambers and his remarks and I only wish we were in the same position of being assured of a profit for the next few years without the worry of competition the one way or the other. I believe in this day and age that businesses are supposed to stand on their own feet. I believe this pipe line was built quite a few years before 1939 and I am just wondering in my own mind - and as I say I am not clear on the question of the records or anything but I am just wondering in my own mind if a large portion of that pipe line has not already been written off from the time of its inception till now. That is one thing that has troubled me.

THE CHAIRMAN: I think, Mr. Christian, you are probably right in that but when this Company was declared to be a public utility the late Mr. Justice McGillivray fixed a rate base.

MR. CHAMBERS: Adopted by the Government.

THE CHAIRMAN: Yes, adopted by the Government.

MR. CHAMBERS: By Order in Council.

THE CHAIRMAN: On the basis of the reproduction value of the system. From that I must go on. I must accept that.

MR. CHRISTIAN: I realize that and I appreciate that. What is in my head was at that time was the asset sold from the Royalite Company to the Valley Pipe Line Company, whether at that time when the sale was made was the sale made at cost less depreciation or . . . . . .

THE CHAIRMAN: Reproduction cost less observed depreciation.

MR. CHRISTIAN: As I say, my interest is in the refinery and and I am not disputing any of these things. I would like to point out that if any raise is made by you, sir, that consideration be given to us in that all raises - all decreases in the pipe line have been passed on to the producers so far.

MR. CHAMBERS: The last increase was not passed on as I understand it.

MR. MCDONALD: All decreases, he said.

MR. CHRISTIAN: All decreases were passed on to the producers. On May 1st, 1945 the pipe line rate dropped to 7½ cents and that drop was passed on to the producers. But when it was increased on February 1st, 1945, instead of taking that 2 cents that had originally been passed on to the producers and setting it back, we were saddled with that. We have received no benefit whatever. Now in that increase of February 1st, 1945, I am just wondering, Mr. Chambers, whether you received the consent of the Wartime Prices and Trade Board to charge us that 2 cents a barrel more.

THE CHAIRMAN: It was still under the ceiling, Mr. Christian. The ceiling was 9½ cents during that period.

MR. CHRISTIAN: Our price per barrel in the field, or

over-all cost was being increased 2 cents a barrel. If this 3 cents is added on to that - I have just returned from Ottawa in connection with this 43 cents a barrel increase that has just come up and naturally I will have to strongly object to any increase in the price of 3 cents to the refinery.

THE CHAIRMAN: That is you object to any price increase if it is passed on to you.

MR. CHRISTIAN: Yes, to the refineries. I believe that that is a matter that should be solely a matter of the producers if such an increase is granted.

MR. CHAMBERS: After all, the utility only has certain customers and those are the refineries and it does not deal with the producersat all. I suggest that is a matter solely between the refinery and the producers and whatever Government body that deals with those things.

MR. CHRISTIAN: In the past we have had no say in the matter whatsoever, as to who said we were going to pay this or that. We just get a bill for 2 cents more, and that was the end of the picture. For my part I do not mind saying that I intend to call a halt. For argument's sake, we are billed by the Valley Pipe Line Company for pipe line charges and loading charges. I am not going to bring up the question of loading charges now because that does not enter into this brief. According to the brief they claim they have no facilities for loading.

THE CHAIRMAN: That is right. The facilities are owned by the Imperial Oil who do the work and bill the Valley Pipe Line.

MR. McDONALD: I might say this matter of who will pay the increases, when ordered, is one that concerns the

producers as well as the refineries. It may be that it will rest with the Wartime Prices and Trade Board who will deal with it if any increase is made now above the 9½ cent rate. That will come under the Wartime Prices and Trade Board and the matter might come to a head there. The producers feel that they have been selling their oil for a number of years at less than its competitive value and it is still being sold at less than its competitive value, therefore the increase, if any, should not be compensated for as far as the refiners are concerned by a reduction in the field price. Now the question of this interim rate, taking effect as of February 1st. It may be in view of the dispute between the refiners and the producers that the Wartime Prices and Trade Board will not deal with it as rapidly as anticipated What I had in mind was this, I feel confident that this Hortonspheres' repair bill is a capital charge and that if that is dealt with by the Board and charged to capital in 1945, there will be a fair surplus available from the 1945 operation and that can be taken into account in . . . . .

MR. CHAMBERS: About $20,000.00.

MR. McDONALD: Yes, about $20,000.00. That can be taken into account in any adjustment that may be necessary before the final figure is set or before the end of February.

THE CHAIRMAN: We can use that as a cushion for any increase that might be made.

MR. CHAMBERS: I do not want to interrupt my learned friend but is he advocating that this $20,000.00 odd should be capitalized as part of the rate base and a return paid on it and depreciated?

MR. McDONALD: That is one thing I have in mind. As

I can look at this from the producers' standpoint in Turner Valley, it may be that the producers in Turner Valley may not change between this date and the final abandonment of the field. If that is so, the only question for the producers to take into account is whether they want to now depreciate as it were the investment in the Valley Pipe Line Company as quickly as possible, having in mind that they will still be customers and receive the benefit of that service in maybe 10 or 12 years from now. If they want to adopt that attitude, it would then coincide as it were with the application now made, including this dealing with the Hortonspheres on the basis on which the Valley Pipe Line Company suggests it should be dealt with.

THE CHAIRMAN: You still want to take instructions on that point?

MR. McDONALD: Yes. I think that is a question of policy for the producers to determine upon.

THE CHAIRMAN: No, I am going to have the final say on that. You have your views.

MR. McDONALD: Yes.

MR. CHAMBERS: I do not suggest it should be settled as a matter of policy for the Producers' Association.

MR. McDONALD: No, I want to take instructions as to what the Producers can do. Then I want to have some instructions in regard to this question of management and that is a matter of policy I think the Producers should decide on too, before they make a recommendation to the Board.

THE CHAIRMAN: Mr. Arnold?

MR. ARNOLD: I have no comments to make.

THE CHAIRMAN: Then we will adjourn.

(At this stage the Hearing was adjourned sine die.)

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